

MOTOR AGE



Texan Speaks Up

**ON VEHICLE SAFETY
INSPECTION . . . 38**

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CAR DEALER DOUBLES AIR CONDITIONING VOLUME	page 52
BUILDING SAFETY INTO STOCK CAR RACING	page 54

WIN one of 94
FREE TRIPS

*Indianapolis
"500"*

**\$50,000.00 PERFECT
CIRCLE CONTEST**

SPECIAL GRAND PRIZES

TWO 1961 THUNDERBIRDS
Twins of the 1961 Pace Car

It's easy and fun to enter...just predict the qualification speed of the pole position winner in the 1961 Speedway time trials!

Plan now to live it up like a king this year at the Indianapolis Speedway Classic! You'll get the full red carpet treatment with a first class round trip by air. Four enjoyable days . . . hotel accommodations and meals—a special tour—and \$50.00 pocket money. If you are a winner you may bring any male employee of your Perfect Circle supplier as a guest. And all winners and guests who make the trip automatically qualify for the grand prize Thunderbird drawings. All you need do is estimate the winning pole position speed in the qualifying time trials and send it in with a PC box part number tab.

You compete only with entrants in your area and you may enter many times. Contest ends April 30, 1961 so enter early—enter often. Complete contest rules are on the official entry form—get one at your PC supplier and test your skill today!

HURRY!
HURRY!



Contest ends April 30!

PERFECT CIRCLE
PISTON RINGS • POWER SERVICE PRODUCTS

Hagerstown, Indiana

New domed points polish off pitting



Every Blue Streak point set now features a polished domed contact that guarantees longer life for the points—and your tune-ups. Made mirror smooth by an exclusive forming and polishing process, Blue Streak's new domed points are completely free of the tiny nicks and grooves that can cause burning and pitting. The domed contact (on the movable arm—where it *belongs*) also provides larger contact area, easier alignment. Get full details today. See your jobber or write for free bulletins. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

SHERLOCK McKANICK

(famous Blue Streak Dealer-Mechanic) Says: "A waterproof Shockmaster® condenser is the perfect tune-up mate for Blue Streak's new domed points.

LubriPoints®, with the automatic cam lubricator, stainless steel spring and other heavy-duty features, are now equipped with the domed point as well.



"Better Buy Blue Streak...Better for Your Business"

“... leaves no stone unturned”

says **J. C. ALBERS**,
Chrysler-Imperial-Plymouth
dealer, Cincinnati, Ohio

“COMMERCIAL CREDIT leaves no stone unturned if there is any chance at all of approving a finance deal. We have found the COMMERCIAL CREDIT PLAN gives better service, faster approval and finer teamwork. It makes it easier for us to sell-up to higher-priced models. Its insurance plans are second to none in the field. Its point-of-sale pieces and sales training aids are outstanding. We cooperate by using double closings, salesman bonuses and contests to increase our deals closed on the COMMERCIAL CREDIT PLAN.”



Commercial Credit serves successful dealers

For complete information on how our service can help promote your success, call or write the COMMERCIAL CREDIT CORPORATION office nearest you.



Better products, faster, from your Federal-Mogul jobber:



Prospect for a '63 overhaul

Will he come to you? Perhaps. But it's the service your customers get today that brings in new jobs next week . . . and in '63. That's why it makes such good business sense to use quality parts that stand up. And one of the brands that keeps engines going—and customers happy—is Federal-Mogul. FM quality has made these engine bearings first choice of U.S. car and truck manufacturers.

Federal-Mogul engine bearings are also America's most available bearings. They are made in thousands of types and sizes for American and imported cars . . . for trucks . . . and for vintage vehicles, too. When you order FM engine bearings you get them on time, and you get your jobs out without needless delays. Why don't you let Federal-Mogul help turn prospects into customers for you?



FEDERAL-MOGUL ENGINE BEARINGS

FEDERAL-MOGUL SERVICE
DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



MOTOR AGE

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UPCOMING

Look for the famous forty pages of work-a-day specifications in our 10th ANNUAL FIX FAX issue in April.

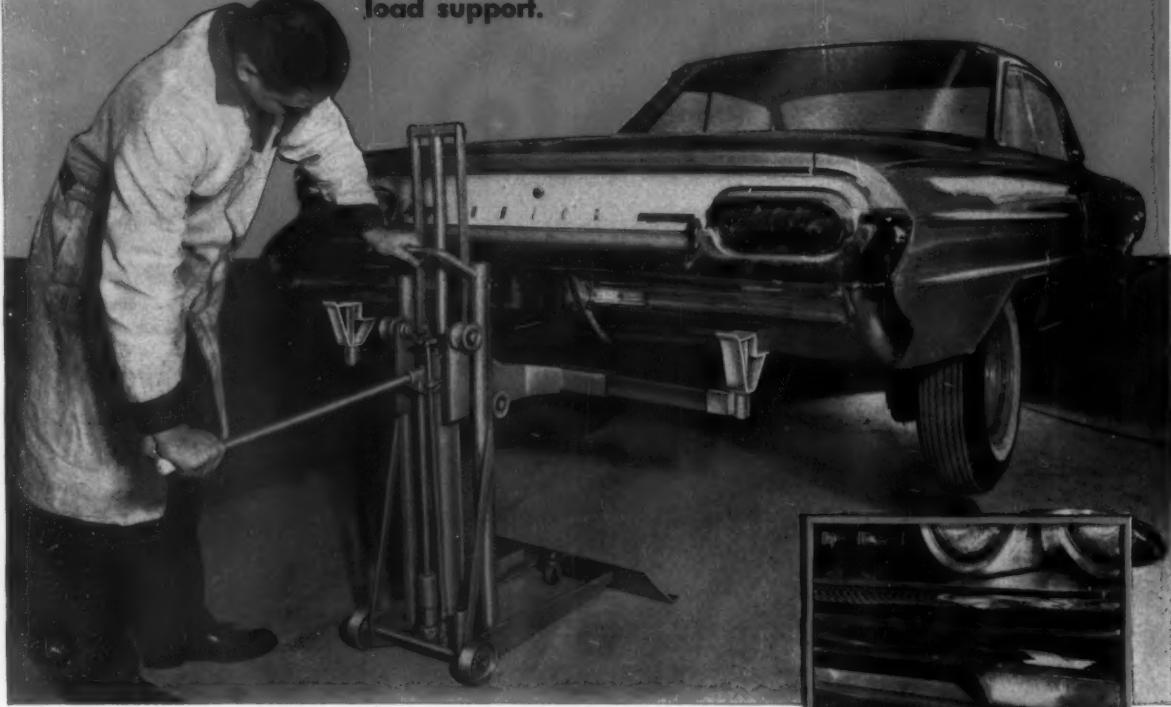
A preview of the Indianapolis Race Cars which will compete in the Golden Anniversary (50th Annual) race in May.



MOTOR AGE, Published monthly by Chilton Company, Chestnut & 56th Sts., Philadelphia 39, Pa. Second-class mail privileges authorized at Philadelphia, Pa., with additional entry at Easton, Pa. Subscription price: United States, United States Possessions, \$4.00 for one year, \$7.00 for two years; Canadian, Foreign, \$5.00 per year; \$8.00 for two years; single copies 40 cents. COPYRIGHT 1961 by CHILTON COMPANY.

Exclusive, new HEIN-WERNER Bi-Level Swivel Saddles

provide two level lifting for better clearance, contact, and load support.



55 PACER with Bi-Level Swivel Saddles properly lifts all 1961 cars

For safely raising 1961 cars, Hein-Werner's "55" PACER and "Screwball" have *new* 360° Bi-Level Swivel Saddles with *extra* span and reach needed to correctly lift *every* automobile—compact or standard. No other one-end lifts are as versatile or up-to-date.

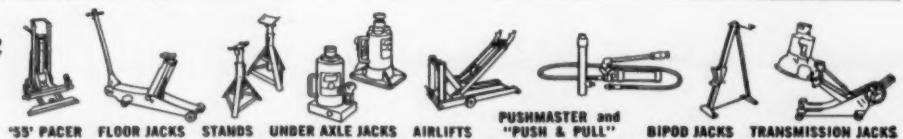
Bi-Level Saddles eliminate overhang and damage to under-car obstructions adjacent to bumpers, brackets, pads, or frame members. Reduces bumper stress by providing two-point support. Take fuller advantage of available lifting height (up to 33 inches), span (up to 56 inches), and reach (up to 14½ inches). Shop-proven "55" PACER also features man-sized lifting rollers that cannot stick or bind; rigid side braces; extra-strong frame members; automatic safety locks at three positions prevent accidental lowering; speedier positioning and spotting using swivel front wheel; extra performance from regular 3-ton Hein-Werner truck jack with overload valve set at 1½ tons capacity.

\$124.50 puts a "55" PACER, or \$91.45 for the "Screwball"—equipped with Bi-Level Swivel Saddles—to work for you now. See your Hein-Werner Jobber, or write us for full details. 1961 Lifting Chart furnished with every jack.

New Bi-Level Swivel Saddles
fit all Hein-Werner "55" and
"Screwball" Jacks now in use—
only \$9.00 a pair!

Hein-Werner again is *first* to help you *keep pace* with lifting needs. Bi-Level Saddles are *available now* to modernize any "55" or "Screwball" jack now in use equipped with swivel saddles. Fully interchangeable—requires no special tools—permits change-over in seconds. See your jobber!

Hein-Werner
CORPORATION
WAUKESHA, WISCONSIN





DO *You* HAVE
THE TOOLS
IT TAKES
TO MAKE MONEY

NEED A HAND TOOL?
CALL YOUR *Blackhawk* JOBBER!



These famous Tools really put you in business and make certain you'll make money in today's automotive service and repairs. Ask your Jobber to show you the many new, time-saving Tools in this great Line that are actually designed around your job! Remember, the cost of Tools you use in your work is deductible from your income tax.

Blackhawk

HAND TOOLS

THE NEW BRITAIN MACHINE COMPANY
NEW BRITAIN • CONN.



"SEE-FOR-YOURSELF" SELLING with John BEAN ALIGNMENT INDICATOR

There's a difference between telling customers they need wheel alignment and *selling* them on it. The difference is a new John Bean Alignment Indicator. You can easily show Mr. Customer a direct reading of side drag in feet-per-mile by having him drive his car over the indicator. Self-contained unit requires no pipes or wires, gives fast readings under actual road conditions with readings on both sides of the indicator tower. Use it to sell wheel alignment service and to check completed alignment jobs. Helps sell more tires, too!

you don't have wheel alignment?

Then, you're missing a booming service business. Two out of three cars need alignment. Better check your John Bean jobber or write for catalogs on John Bean alignment equipment. Models for every operation, to meet any budget or space limitations.

free catalog

Ask your John Bean jobber or write for free Catalog L-1714 (Special Service Station Issue) with wheel alignment and balancing equipment, car washers, alignment indicator, tools and accessories.



John
BEAN®

DIVISION OF
FOOD MACHINERY AND CHEMICAL CORPORATION
LANSING, MICHIGAN

fmc
FOOD MACHINERY & CHEMICAL CORPORATION

Get this G-E MAGNETIC "GRIP-STICK" FREE*

fish small parts and tools from hard-to-get-at places



GENERAL ELECTRIC

TOUGH PLASTIC GRIP
non-slip; easy to clean

CADMIUM PLATED STEEL
won't rust

TELESCOPIC
extends to 20 1/2";
telescopes to 12 1/2"

ONLY TIP OF MAGNET EXPOSED
less likely to stick to surrounding metal

DEMAGNETIZED SPRING
probes around corners

LIFTS UP TO 5 OUNCES
Alnico 5 magnet

***Get it free from your General Electric headlamp supplier with one case of #4002 G-E headlamps and one case of any other G-E headlamps** — You pay just the regular price for the 2 cases of headlamps. You don't pay for the "Grip-Stick" out of hard-earned profits. The "Grip-Stick" is in specially marked cases of 4002's. Get one while they last:

More of your customers are driving four-headlamp cars. So be prepared to cash in on this rapidly growing replacement business. Stock up now. And while you're at it, remember that one out of ten of your customers needs a new rear light so get a supply at the same time:

A big replacement market is still on two-headlamp cars, too. And to help you get a big share of this market, General Electric is running a full scale campaign in national magazines this spring. Take advantage of it, and suggest to your customers that they buy *two* G-E SUBURBAN Headlamps when they come in with *one* burnout. General Electric Company, Miniature Lamp Department, M-114, Nela Park, Cleveland 12, Ohio.

Progress Is Our Most Important Product

GENERAL  **ELECTRIC**



NOW AVAILABLE:

MoPar Approved Remanufactured Parts for Chrysler-built vehicles, Rempar Quality Remanufactured Parts for other makes of vehicles.

6 and 8 cylinder engines (short and complete)
 V-8 cylinder heads
 automatic transmissions
 fuel pumps
 generators and armatures
 starters and armatures
 voltage regulators
 carburetors
 clutch assemblies
 crankshaft kits
 oil pumps
 connecting rods
 torque convertors

DEPENDABILITY

YOU GET IT—WHEN YOU INSTALL THE MOPAR APPROVED QUALITY LINE OF REMANUFACTURED PARTS

Customers want dependability. When you offer it, you build repeat business and attract new business. Why take chances with just any kind of rebuilt parts—parts of doubtful quality? When you tie the reputation of your shop to the dependability of MoPar Approved Remanufactured Parts, you can install with confidence.

The complete line—MoPar Approved Remanufactured Parts for Chrysler-built vehicles and Rempar Quality Remanufactured Parts for other makes of vehicles—comes with dependability built in. And it's backed with a NATIONAL WARRANTY (4000 miles or 90 days) by the MoPar Approved Parts Remanufacturers.

For dependable remanufactured parts, competitively priced, choose MoPar Approved Remanufactured Parts. They will help build business for you. For fast delivery and one-stop ordering, call your Chrysler Motors Corporation Dealer or MoPar Wholesaler.



MOPAR PARTS AND ACCESSORIES, CHRYSLER MOTORS CORPORATION, DETROIT 31, MICHIGAN

The Champion Spark Plug Company
offers you the greatest Grand Prize ever!

WIN YOUR OWN AIRLINER

AND CREW FOR 2 WEEKS—

PLUS \$5,000 SPENDING MONEY!



This is yours for 2 weeks: Private, luxurious airliner and crew, ready to fly you anywhere in North America!

Plan your own trip . . . anywhere in North America! You are in command! You can take along your family and friends—up to 12 people in all. Spend the \$5,000 as you please! All plane expenses are paid—and all tax is paid on the total first prize!

Dream about it for a moment. Where would you go?

TURN PAGE FOR DETAILS ON THE GREATEST CONTEST IN AUTOMOTIVE PARTS HISTORY... ➤

CHAMPION OFFERS YOU 1,160 CHANCES TO WIN VALUABLE

Here's what you can win... Champion is doing to help

Here's the fabulous
Grand Prize—
your own airliner
and crew for 2 weeks
—plus \$5,000
spending money!



Fly from place to place whenever you like—anywhere in North America! Take along your family and friends—up to 12 people in all. Plane and crew expenses are paid. Tax is paid on *all* the first prize—including the \$5,000!

Here's a flight map—Let your imagination roam! See the places you've always wanted to see. Go anywhere in the continental United States, Canada or Mexico... any place in the areas shown above. You name it!

HERE ARE THE OTHER WONDERFUL PRIZES— 1,159 ADDED CHANCES FOR YOU TO BE A WINNER!



COMET 2-DOOR SEDAN
Equipped with heater, whitewall tires.



FALCON TUDOR SEDAN
Equipped with heater, whitewall tires.



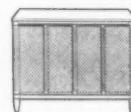
LARK 2-DOOR SEDAN
Equipped with heater, whitewall tires.



**RAMBLER AMERICAN
2-DOOR SEDAN**
Equipped with heater, whitewall tires.



**2 LONE STAR 15-FT.
RUNABOUTS**
With trailer, up-to-40 HP outboard motor.



**12 STROMBERG-
CARLSON CONSOLES**
Stereo hi-fi phone, AM-FM radio.



**35 BELL & HOWELL
MOVIE CAMERAS**
8 mm., automatic electric eye.



156 EVANS BICYCLES
Interceptor 300 model, boy's or girl's styles.



**250 COLEMAN
CAMP STOVES**
Lightweight, clean-burning, durable.



**700 COLEMAN
PICNIC COOLERS**
Well-insulated, lightweight.

PRIZES—AND UNLIMITED CHANCES TO EARN EXTRA PROFITS!

how you win it...and what you earn prizes-and profits!

**THIS CONTEST IS FOR YOUR CUSTOMERS, TOO—
AND HERE'S WHAT YOU BOTH DO TO WIN IDENTICAL PRIZES**

To enter the contest, a motorist gets his spark plugs checked by you and has a contest entry blank signed to certify that it has been done. Then he takes the entry blank home, completes a simple statement, and drops it in the mail. If he is one of the lucky contest winners, whoever certified his spark plug check by signing his entry blank automatically wins an identical prize!

That's all there is to it. As you can see, the more spark plug checks you give and certify, the more chances you have of winning! And you

can win more than one prize—because for every prize-winning customer you certify, you win an identical prize.

In addition to offering fabulous prizes, the contest gives you an opportunity to earn extra profits through increased sales of spark plugs and other parts. Experience has shown that checking spark plugs sells spark plugs—and other parts, too! So get busy as soon as you receive your contest material. (Look for it early in April.) Offer a free spark plug check to every customer!

**HERE'S THE POWERFUL ADVERTISING SUPPORT CHAMPION
IS GIVING THE CONTEST—AND WHAT YOU GET TO "TIE IN"...**



The above ad will announce the contest in all the magazines listed below starting April 11—in over 65 million copies reaching 9 out of every 10 car owners!

LIFE...LOOK...SATURDAY EVENING POST...READER'S DIGEST...THIS WEEK...PARADE...POPULAR MECHANICS...POPULAR SCIENCE...MECHANIX ILLUSTRATED...HOT ROD...MOTOR LIFE...MOTOR TREND...ROAD & TRACK...FARM JOURNAL...FARM and RANCH...PROGRESSIVE FARMER...SUCCESSFUL FARMING



Window Banner tells everyone who drives in about the contest, urges them to "enter here"!



Counter Easel tells motorists about the fabulous Grand Prize, also displays and holds entry blanks!



Plans Book tells how to make the most of contest opportunities, includes hints for helping your customers with their entry statements.

AND HERE'S HOW EASY IT IS FOR YOU TO REALLY "CASH IN" ON THIS PRIZE-PACKED, PROFIT-PRODUCING CONTEST...



"WIN YOUR OWN PLANE" CONTEST IS GREAT OPPORTUNITY FOR YOU!

HERE'S HOW TO REALLY BOOST YOUR PROFITS WITH THIS CHAMPION CONTEST

One out of every 2 cars needs new spark plugs right now! So you do your customers a real service by checking their plugs. And remember this important fact: Checking sells lots of spark plugs—and leads to many other profitable sales as well! So just take these 4 easy steps to profit...



1 HAVE AMPLE STOCK OF CHAMPIONS

You should easily double or triple your spark plug sales during the contest. So don't run out. Have plenty of Champions on hand. (You can service 95% of the cars on the road with the 9 types in Champion's Utility Line.)



2 HAVE TOOLS FOR EASY PLUG CHECKING

The best and easiest way to check spark plugs is right in the engine—with the Champion Plug-Scope! And the Plug-Master wrench and magnetic Plug-Mate socket make plug installation and removal faster and easier.



3 PUT UP ALL CONTEST DISPLAY MATERIAL

As soon as you get them, put your contest window banner and counter easel up where everyone will see them. Use them to call attention to the contest, and to help you get every one of your customers entered in the contest.

This contest offers you unlimited opportunities to win fabulous prizes—including your own plane and crew for 2 weeks—plus \$5,000 spending money—all tax-paid! In addition to the 1160 prizes, it's a real opportunity to earn extra profit through increased sales of spark plugs and other parts! As soon as you receive your contest material, get busy right away. Offer a free spark plug check to every customer!

4 URGE EVERY CUSTOMER TO ENTER

Plan to put on a real drive during the contest. Checking plugs always leads to increased sales of spark plugs and other parts and services. And the more entries you certify, the better your chances of winning prizes.



CHAMPION SPARK PLUG COMPANY • TOLEDO 1, OHIO



A new Time-Saver... makes 101 jobs easier!

CRC 5-56 makes easy work out of many automotive repair jobs. This amazing formula restores original torque values to corroded and rusted nuts, bolts and studs, cleans surfaces quickly and has a beneficial lubricating effect. Equally important, CRC 5-56 drives out moisture and forms a continuous protective film which prevents future deterioration of parts due to moisture. Shorting of ignition and electrical components, due to condensation and splashing, can be eliminated by spraying with CRC 5-56.

CRC 5-56 is harmless and non-toxic. It will not evaporate and become brittle and hard and, once applied, there is no time limit on its effectiveness. Try it today while you are doing a complete engine overhaul, disassembling components for repair and adjustment or making a minor tune-up. Then you'll know why successful mechanics use CRC 5-56.

CORROSION REACTION CONSULTANTS
116-V Chestnut Street, Philadelphia 6, Pa.

MAKES 101
JOBS EASIER!





THE *Blue Box* LINE.

...synonymous with quality

NOW ...the new

McQUAY-NORRIS

MI-1000 ENGINE BEARING

EXTRA

- ✓ Durability
- ✓ Conformability
- ✓ Imbedability

The **MI-1000** engine bearing has an "extra thin" babbitt lining only .001 of an inch thick, electrolytically applied on a hard and durable sintered copper-lead base. The **MI-1000** has the fine anti-friction qualities of babbitt plus the terrific strength of copper-lead—so it is easy on the shaft, yet won't pound out under the most severe service.

The combination of the **MI-1000** plus McQuay-Norris Heavy-Duty, Chrome Control, Leak-Proof Piston Ring set, not only keeps the job running longer, but also cuts gas and oil costs.



the new **MI-1000** ENGINE BEARING

1. Precision Steel Back
2. Sintered Copper-lead Lining
3. Barrier Plate
4. One thousandth of an inch Babbitt Overlay
5. Pure Tin Flash

**Let your McQuay-Norris
Wholesaler supply you with the
new **MI-1000** engine bearing!**

McQUAY-NORRIS
MANUFACTURING CO.,
ST. LOUIS • TORONTO





DITZLER SHELF-SHOP MIX.
For the shop with limited shelf space. This compact unit comes in two sections. Requires only 16 sq. ft. of floor space, and wall space just 8 ft. wide and 7 ft. high. Can be used in straight line or in corner.

DITZLER color mixing system cuts costs 4 ways

1. More accurate color mixing
2. Mix only amount needed for job
3. No waiting for needed colors
4. Eliminates costly inventory of half-used and slow-moving colors

• Whether your shop is large or small, you'll find the DITZLER Color Mixing System one of the most profitable investments you can make.

• Constant improvement has placed the DITZLER mixing system far ahead of all other kinds in simplicity, efficiency and accuracy. It gives you 8,000 laboratory-controlled formulas for lacquers, acrylics, and enamels—covering latest models as well as older cars and trucks. Also provides you with formulas for interior colors, im-

ported cars, commercial vehicle fleets, boat finishes, appliance colors, farm machinery, and many others.

- You'll service customers more quickly, match colors more efficiently and accurately—and with less waste.
- Rugged and well-built, the DITZLER Shelf-Shop Mix lasts for years. You'll continue to enjoy the extra profits it makes for you long after it has paid for itself.
- Call or see your nearest DITZLER jobber for details.

Ditzler Color Division, Pittsburgh Plate Glass Company • Detroit 4, Mich. • Torrance, Calif.



DITZLER[®]
PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

CHEVY'S "WALKING WHEELS" RIDE COSTS DOWN FOR OWNERS, RIDE SALES UP FOR DEALERS!!!



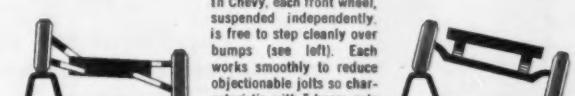
■ A year or so ago, Chevrolet engineers went one up on the industry with a sweeping new design improvement—Independent Front Suspension for the full range of Chevrolet truck models. Here was a truly important innovation, one that has proved its ability to work wonders both for the men who use Chevy trucks and the men who sell them.

The basic idea is so sound that it has all but revolutionized truck performance. Each front wheel is suspended independently by rugged control arms; when a bump looms up, the wheel "walks" right over it. This bump-beating wheel action, virtually the opposite of what is provided by ordinary I-beam axle front suspensions, offers many new benefits to truck users. For instance, most road shocks and jolts never reach the truck chassis, cab or body. The truck rides smoothly, takes less of a beating, stays in cost-saving shape longer. It adds up to important savings on maintenance for the owner.

Furthermore, thanks to those same "walking wheels,"

loads do far less bouncing in the body of a '61 Chevy truck. That means owners are protected from undue cargo damage that can eat away at earnings. And the new design contributes to faster, more profitable schedules, too, because drivers, protected from jolts that cause fatigue, can stay on the job longer.

That's the way Chevrolet truck Independent Front Suspension has been working out for hundreds of thousands of owners all over the country. It has become a real income-booster for these busy haulers . . . and for Chevrolet dealers, too! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



In Chevy, each front wheel, suspended independently, is free to step cleanly over bumps (see left). Each works smoothly to reduce objectionable jolts so characteristic with I-beam axle design (right).

CHEVY IFS TRUCKS
INDEPENDENT SUSPENSION

MAREMONT PROJECT '61...DELIVERS

The Great Advance in Muffler Quality

NEW

MAREMONT MUFFLER



Every tube—every support—heads—shells—end tubes . . . now all alloy-coated with the original Maremont coating of aluminum, cadmium, lead and zinc.*

You've never sold a muffler so well protected against rust and corrosion. You've never sold a muffler so easy to install—yet so precisely, so perfectly fitting!

You've never sold a muffler with such a common sense guarantee . . . a guarantee of real benefit to dealer and motorist alike!

You've never sold a muffler with such helpful tools, installation tips, other technical helps. They keep work costs low—profits high!

You've never sold a muffler where high profit for you and highest product quality go so well together!

*on all mufflers with critical corrosion applications

the original ALLOY-COATED*



MAREMONT

Trademark

YOUR BIG YEAR IN MUFFLERS!



Guarantee

This genuine Maremont Muffler has been custom designed for its specific engine by Maremont's exclusive Electronic Dynamometer.® Precision produced to the highest manufacturing standards, this Maremont Muffler assures maximum quieting without objectionable back pressure.

Maremont Mufflers feature special Alloy-Coated Steels

wherever needed on shells, end caps, tubes or supports to

meet Maremont's rigid requirements for rust-resistant quality.

Every Maremont Muffler is Fully Guaranteed against

defective workmanship and materials. Maremont quality is

certified by Scientific Control Laboratories, Inc.



YOU'VE NEVER SOLD A MUFFLER SO EFFECTIVELY ADVERTISED TO AMERICA'S MOTRING MILLIONS AND WITH YOU AS THE STAR

First, Network radio, Network TV and now, LIFE, LOOK and the SATURDAY EVENING POST. 76 million readers will be told to rely on you . . . because the man who installs Maremont Mufflers provides the best service in every way!

MAREMONT MERCHANDISING POWER TURNS PROSPECTS INTO PROFITS!

FOR YOUR WINDOW—Colorful 3 x 6 foot clear plastic display.

FOR YOUR CURB—Famous 4 x 6 foot traffic-stopper curb sign.

Plus the industry's most complete assortment of sales aids for you . . . all designed to fit your needs.

GET THE EXCITING NEW GREATER MUFFLER PROFIT STORY FROM YOUR MAREMONT JOBBER!

He has the facts and figures that prove mufflers provide the most profitable 15 minutes of lift time you'll ever know! Call him today.

MARPRO, INC., MAREMONT MUFFLER DIVISION

168 N. Michigan Ave., Chicago 1, Ill.

In Canada: Maremont-Acme Ltd., 207 Weston Road, Toronto, Ontario

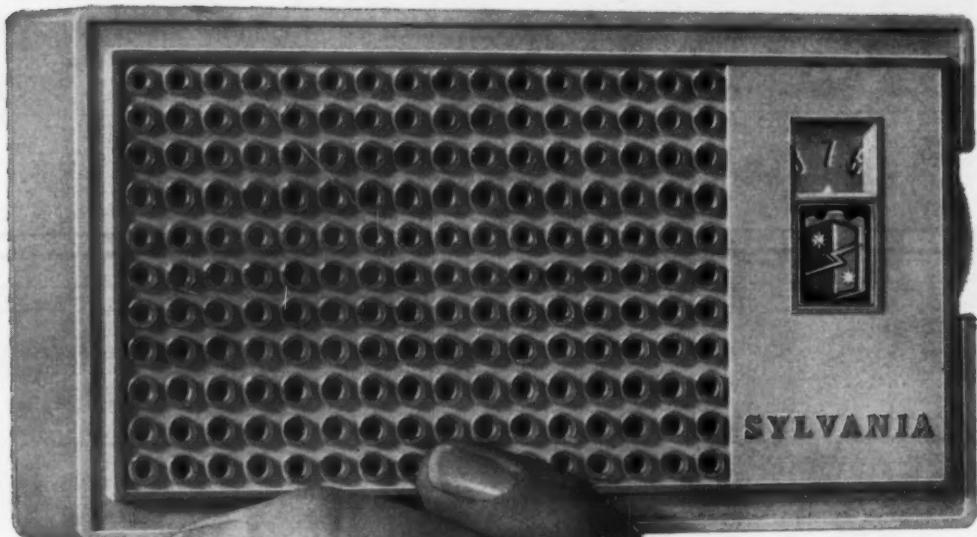


MUFFLER America's most imitated muffler

Copyright, 1961, MARPRO, INC.

PUROLATOR'S

Features this SYLVANIA



Jewel-like in appearance

...yet packed with power—this \$34.95 Sylvania model 4 P19 American-made radio costs you nothing when you buy the 1961 Purolator Bonanza deal.

1961 BONANZA

\$34⁹⁵*

WOW!

Transistor Radio

**Here's all you do to get this
\$34⁹⁵ transistor radio at no extra cost!**

- ✓ Get the Purolator Bonanza assortment of 27 fast-moving filters for \$49.95.*
- ✓ Included right in the same package is your \$34.95* Sylvania radio (and an Eveready transistor battery for immediate play).

PUROLATOR'S NEW

LISTEN TO THE MAN..!

PROMOTION WILL

MAKE 1961 YOUR BEST YEAR IN FILTER SALES... *for details, Turn to Pages 30, 31*

"Sylvania" and "Purolator" Reg. U. S. Pat. Off.

*Suggested Prices



The Standard Equipment Line

PUR~~O~~LATOR

OIL, AIR & FUEL FILTERS

PUROLATOR PRODUCTS INC., Rahway, N. J.; Toronto, Ontario, Canada



NATIONAL ACCOUNTING SYSTEMS
are fast, flexible, and accurate.



MODERN EXTERIOR of
O'Reilly Chevrolet Agency.



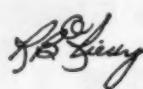
THIS NATIONAL SYSTEM
pays for itself every year.

"Our *National* Accounting System saves us \$16,800 a year... returns 100% annually on investment!"—O'Reilly Chevrolet Agency Tucson, Arizona

"Our first National Class 31 was installed in 1951. In 1958 we purchased a Class 2000 analysis machine. And in 1960 we installed an additional Class 31.

"We have found that the flexibility of the National Equipment is one reason we have been able to handle increased volume at a low cost. The accounting requirements have completely changed during the last ten years but our National machines have not become obsolete.

"Without National equipment it would be necessary to employ four additional persons. Our investment in this equipment saves us \$16,800 a year. This equipment pays for itself every 12 months!"


General Manager
O'Reilly Chevrolet Agency

Your auto agency, too, can benefit from the many time- and money-saving features of a National System. Nationals pay for themselves quickly through savings, then continue to return a regular yearly profit. National's world-wide service organization will protect this profit. Ask us about the National Maintenance Plan. (See the yellow pages of your phone book.)



* TRADE MARK REG. U. S. PAT. OFF.
National*
ACCOUNTING MACHINES
ADDING MACHINES • CASH REGISTERS
ELECTRONIC DATA PROCESSING
NCR PAPER (NO CARBON REQUIRED)

THE NATIONAL CASH REGISTER COMPANY, Dayton 9, Ohio
1039 OFFICES IN 121 COUNTRIES • 77 YEARS OF HELPING BUSINESS SAVE MONEY

NEW "BELL-RINGER" Demonstrator FREE!



Helps you sell more MONROE Super Load-Levelers®

Terrific merchandising idea that will help you ring up more sales than ever before! With each assortment of the 6 most popular Super Load-Levelers, you get the new Monroe "Bell Ringer." It's a handy car level gage that you put under a rear bumper, like a bumper jack.

Set the gage to fit the customer's car. Add weight to the rear seat or trunk. The buzzer sounds . . . and the indicator rod clearly shows whether your customer needs Super Load-Levelers for a safer, more comfortable ride.

Call your jobber now. Get all the details about this terrific **MONROE BR-6 ASSORTMENT!**

FREE

- \$5 Bell Ringer
- \$3 Outdoor Plastic Banner (10')
- \$3 Display Board and Rack
- Window Banners
- 100 Hand-out Leaflets

BR-6 Assortment—6 Super Load-Levelers

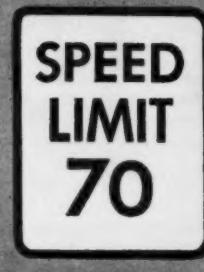
Your selling price	\$131.70
Cost	88.50
YOUR PROFIT	\$43.20



MONROE AUTO EQUIPMENT COMPANY • MONROE, MICHIGAN
In Canada, MONROE-ACME LTD., Toronto, Ontario • In Mexico, MEX-PAR, Box 28154, Mexico City
WORLD'S LARGEST MAKER OF RIDE CONTROL PRODUCTS



Signs of Extra Profits



The plugs that adapt to every driving condition

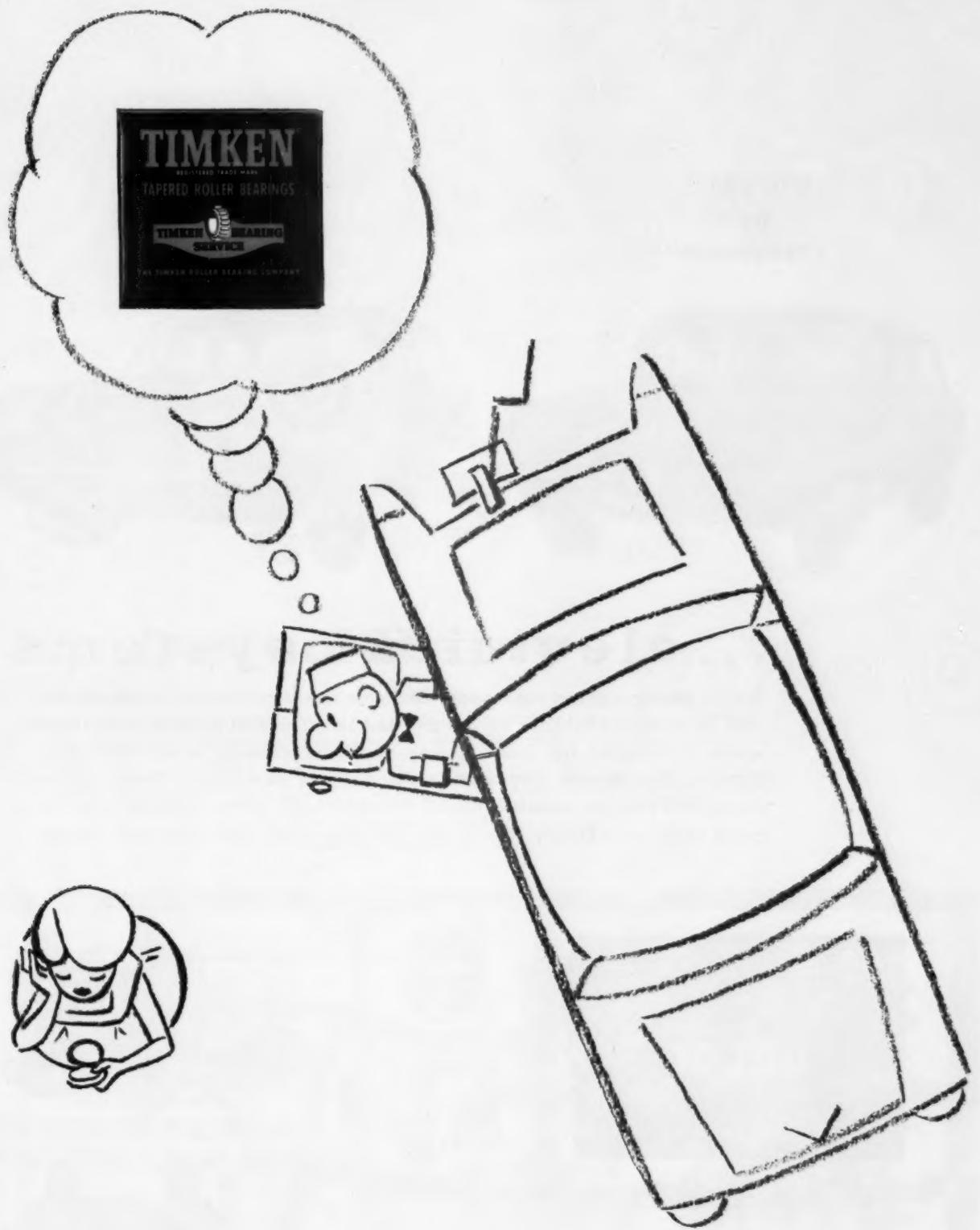
ROBERT BOSCH *thermo-elastic* SPARK PLUGS

Adaptability to the driving condition of the moment! It's yours in the thermo-elastic plug—the heavy duty performance plug that prevents pre-ignition, fouling, loss of power—brings you more profit per plug. Original equipment on best-selling imports. Ideal for all domestic applications as well.

Write for details: ROBERT BOSCH CORPORATION
40-25 Crescent St., Long Island City 1, N.Y. 225 Seventh St., San Francisco, Calif.

ROBERT BOSCH
PUTS THE
POW'N'POWER

The ROBERT BOSCH name also identifies the best in ignition, lighting and starting equipment, electric wipers, coils, horns, regulators, fuel injection systems and other fine products.



Your customers come back for the best . . .
so tell 'em you always use Timken® tapered roller bearings

Corvair
by
Chevrolet

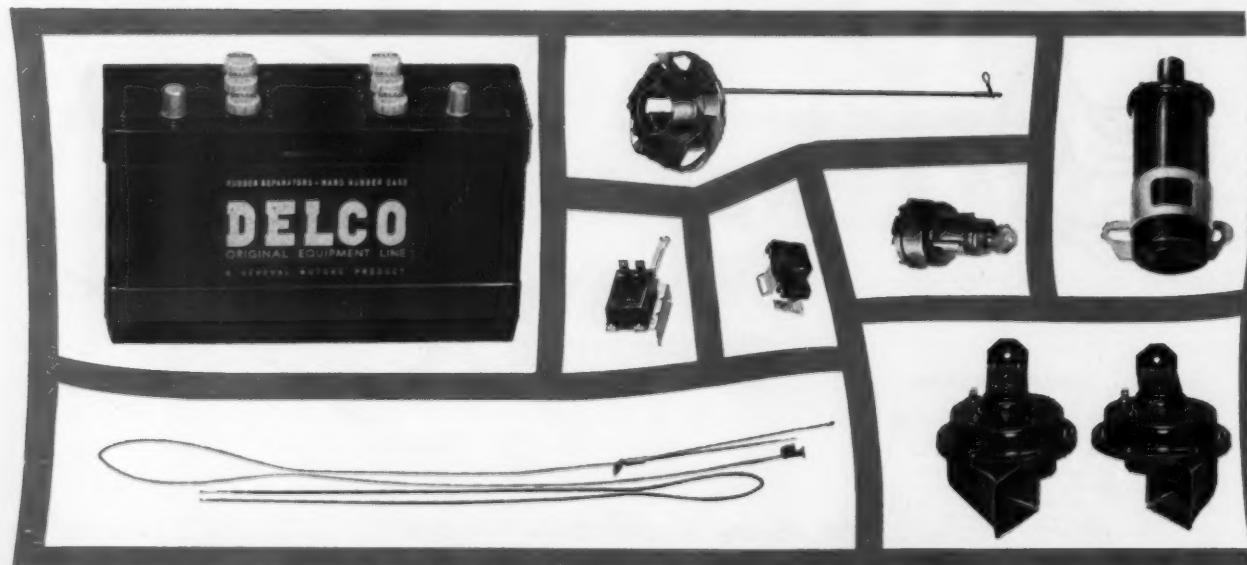


Tempest
by
Pontiac



...electrical systems

Delco-Remy systems provide electrical energy for the needs of motion in General Motors new size cars, too. Special electrical systems were developed by Delco-Remy working closely with Chevrolet, Pontiac, Buick and Oldsmobile. In all four new cars, these lighter units deliver the same kind of reliable high performance that has been built into Delco-Remy electrical systems for over fifty years.



Special
by
Buick



F-85
by
Oldsmobile



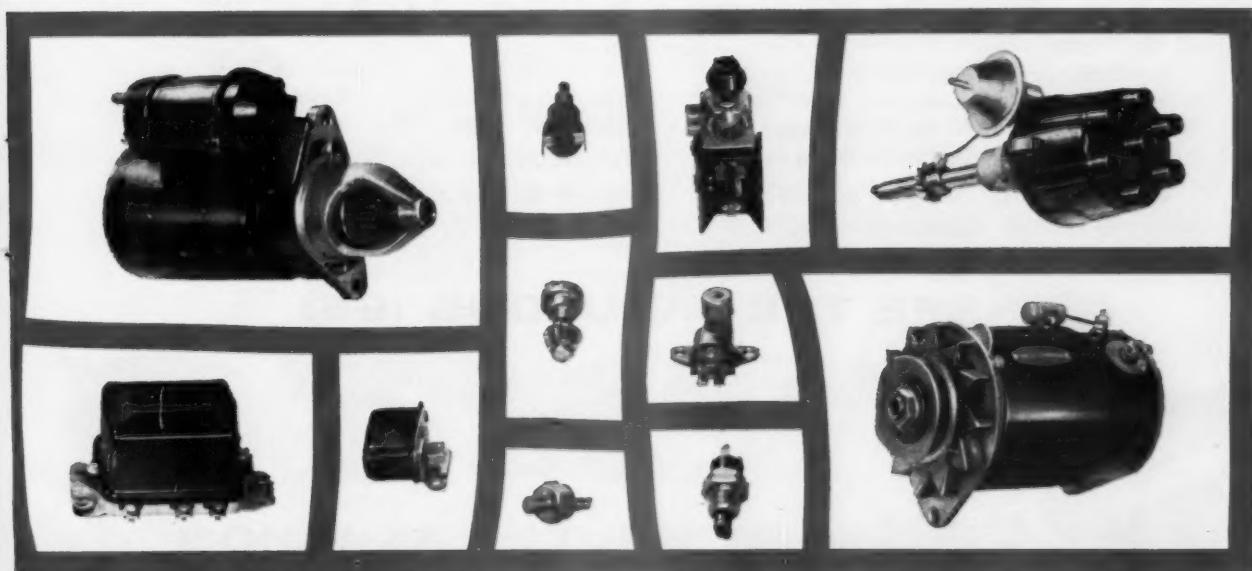
by Delco-Remy

Delco-Remy equipment for the Corvair, Tempest, Special and F-85 includes • Generators • Regulators • Cranking Motors • Distributors • Ignition Coils • Horns • Flexible Cable Controls • Directional Signal and Control Switches • and Delco Batteries.

Delco-Remy electrical systems

From the highway to the stars

DIVISION OF GENERAL MOTORS, ANDERSON, INDIANA



LISTEN TO THE MAN...!



RADIO WILL GET Purolator's "Listen to the Man" message to your customers. *All Summer* Monitor's 200 NBC stations . . . *Spring and Fall* there's local radio in 70 major markets—a total of 50,000 radio announcements.

To help you sell filters, filters and more filters

Purolator says "LISTEN TO THE MAN"

... the biggest promotion in filter history
stresses your know-how and service

Purolator brings you into its 1961 advertising program . . . helping you sell more filters, more of all the products and services you offer.

How? Simply by telling your customers to listen to you . . . to take your expert advice when you suggest an oil and filter change . . . or make any recommendations for better car care.

To be sure your customers get this sound advice—Purolator's "Listen to the Man" promotion is big—coast-to-coast network radio

. . . local radio in 70 key markets . . . 600 reflectorized full-color highway signs.

So get ready to sell more Purolator filters, more oil changes, more of everything. Tie into the program, by using the colorful new "Listen to the Man" displays in your station.

Remember, Purolator filters are a big profit item. You make an average profit of \$3 on every oil and filter change . . . and every Purolator air filter you sell is an extra \$4.00 sale.

SEE THE FABULOUS 1961



OIL, AIR, &
GASOLINE FILTERS
"Purolator" Reg. U.S. Pat. Off.

PUROLATOR

LISTEN TO THE MAN...!



600 HIGHWAY SIGNS will blaze out the "Listen to the Man" message 24 hours a day, 365 days a year on major highways.

LISTEN TO THE MAN...!



THERE'S TV, TOO . . . chances are good the special Purolator "Car Care Series for Women" will be seen by your customers during 1961. It reminds your women customers that you are the car-care expert . . . "The man" to listen to!

LISTEN TO THE MAN...!



BE "THE MAN" to listen to . . . talk up good car care. Don't miss an opportunity to tell your customers why good filtration prevents needless engine wear.

LAT O R

BONANZA . . . TURN TO PAGES 22, 23

NOW STOCKED BY YOUR VICTOR JOBBER



The top line of power steering parts

A TRULY
"FIRST LINE" SERVICE

FIRST COMPLETE COVERAGE—Replacement parts for all types of power steering units . . . for all Chrysler, Ford, and General Motors models, including models prior to 1955.

FIRST AID FOR ALL POWER STEERING MAINTENANCE—

- Master Rebuild Kits
for complete overhaul
- "OEM" Kits for partial repairs
- Reservoir Cover Gaskets
- Pressure and Return Hoses
- Oil Seals

FIRST-CLASS CATALOG—A serviceman's delight! Easy to use . . . accurate . . . gets you to your needs fast! Lists both Victor numbers and matching factory parts numbers. Separate numerical listings for interchange.

FIRST-RATE INSTALLATION DATA—Exploded views of all power steering unit assemblies shown in catalog and, as applies, on instruction sheet enclosed with each Master Rebuild Kit. All parts clearly coded and identified for proper selection.

ASK FOR VICTOR POWER STEERING PARTS TO GET THE BEST

Victor Mfg. & Gasket Co., P.O. Box 1333, Chicago 90, Ill. Canadian Plant: St. Thomas, Ontario

VICTOR
GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line—for Cars, Trucks, Tractors, Stationary Engines

Do You Belong in the Automotive Service Equipment Business?



E. N. ROBINSON
Vice President
Stewart-Warner Corporation

THE automotive service industry is an industry which is constantly moving, constantly changing. It is truly dynamic in every sense of the word. In fact, there have been so many changes in the industry since the original concept of the automotive jobber that I have been asked to discuss with you the jobber's current position in relation to the automotive service equipment business.

The title I have chosen for these remarks asks this question—"Do You Belong in the Automotive Service Equipment Business?" It is a provocative question and one which every automotive jobber has asked

himself any number of times in his business life. In echoing that question today, I certainly do not want to convey the impression that I am being either flippant or facetious. I am raising this question in all sincerity in the hope that we may spend the next few minutes together, profitably, in a realistic appraisal of the wholesaler's position in the equipment market and, as a result, accomplish three things:

1. Establish whether the market lends itself to proper cultivation and development through jobber channels.
2. Examine the factors which are essential to success in selling automotive service equipment profitably.
3. Appraise realistically the future market opportunity for equipment wholesalers.

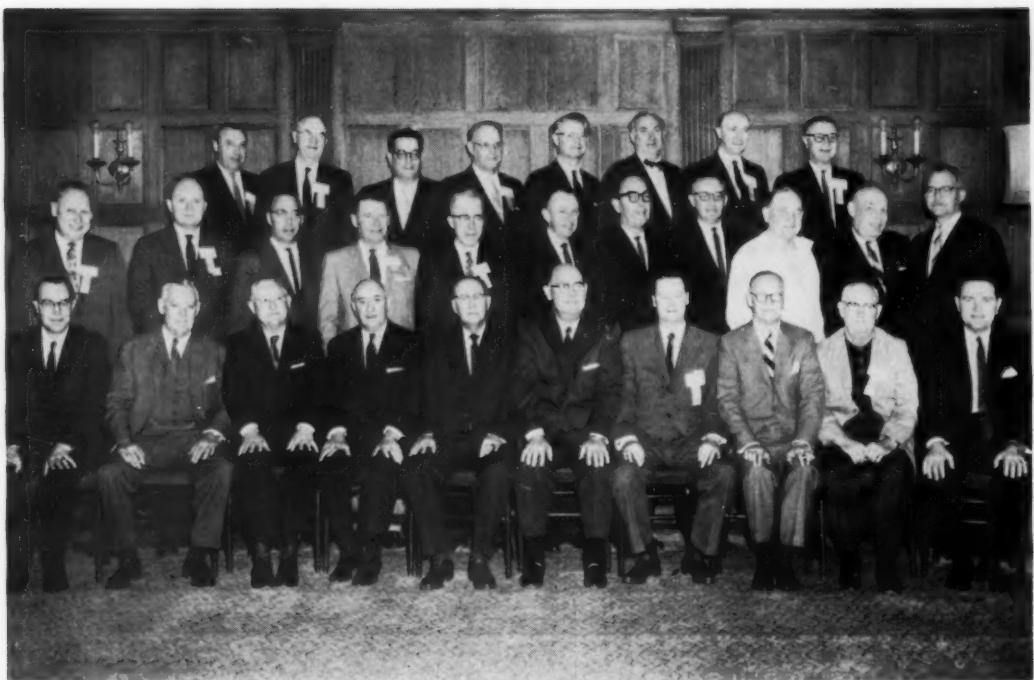
First, let's define what we mean by "automotive service

equipment." For the purpose of this discussion the term applies only to those types of service equipment which jobbers buy for resale. It does not include the specialized machinery and equipment found in the jobber's own machine shop.

Typical examples of the types of equipment that come within this definition are battery chargers, jacks, air compressors, lubrication equipment, wheel balancers, lifts, tune-up equipment, engine analyzers, and the like.

The manufacture and sale of automotive service equipment is big business. Truly, it is a gigantic industry. Some wholesalers are very successful in this field; others are not. Some have made it the major part of their business; others have no interest in this field and confine their activities instead to the sale of parts and accessories. And so it is a little dangerous to generalize, yet it is interesting

Continued on page V



The new Board of Directors of the Automotive Service Industry Association poses for its first photograph of 1961 during the show at Los Angeles. Missing from the photo is Don H. Teetor.

Highlights of the 1961 I.A.S.I. Show . . .

The I.A.S.I. Show was an unqualified success and a tribute to all manufacturers, wholesalers, and the repair trades who keep the nation's vehicles rolling

The 1961 International Automotive Service Industries Show, presented by Pacific Automotive Show opened on February 16 at the Memorial Sports Arena in Los Angeles, California. The Show was planned at the manufacturer-jobber-dealer level. More than 1,157 booths filled the Sports Arena and overflowed into the Portico Annex.

Sponsoring wholesalers from the 13 Western states, Western Canada and Mexico were hosts to other wholesalers and jobbers from all over the world. More than 40 foreign countries were represented.



The 1961 IASI show got under way with the ribbon cutting ceremonies. Left to right: Frank W. McMurray, Calif., Pres. of IGOA; Ward R. McClelland, Pres., B-20; J. Leonard Gibson, Exec., Mgr. Pacific Automotive Show; J. K. Wilkinson, Pres., Pacific Automotive Show and Pomona Motor Parts; Harry C. Younger, 1st VP of AAR; P. Ted Johnston, Pres., of CAWA and Motor Parts Depot, Los Angeles, Calif.; Dan J. Hartnett, Field Secretary ASIA.



Above: Kentucky Colonels in ASIA. Left to right, being presented official commissions are: J. A. Bryant, Bowling Green, Ky.; Les A. Thayer, Chicago; and Jack Wiggins, executive secretary. Jack Walsh between Thayer and Wiggins, executive director of Desert Inn, Las Vegas made the presentation.

Below: Winner of the 1st annual Saturday Evening Post ASI Wholesaler Award is Carlyle Fraser, Ch. of Bd., Genuine Parts Co., Atlanta, Ga. Honoring him are left to right; E. H. Francois, Gen. Sales Mgr., Mr. Fraser, J. A. Anderson, Gen. Mgr., and H. J. Wilburn, Reg. Mgr., AC Spark Plug Div., Atlanta, Ga.



**THE
PULSE
OF
AUTOMOTIVE
BUSINESS**

Automotive Wholesaler's Sales and Inventories

Data from the Bureau of the Census, Dept. of Commerce

Region	Per Cent Change in Sales					Per Cent Change in Inventories				
	Dec. 1960 from Dec. 1959	Dec. 1960 from Dec. 1960	12 Mos. 1960 from Nov. 1959	Dec. 1960 from Dec. 1959	Dec. 1960 from Nov. 1960					
New England.....					
Middle Atlantic.....	+11	-4	+3	0	-1					
East North Central.....	+6	-7	+3	+5	+1					
West North Central.....	+8	+3	+1	-2	-6					
South Atlantic.....	-1	-23	+1	+1	0					
East South Central.....	+11	-10	+2	+1	-2					
West South Central.....	+6	-6	-3	-1	-3					
Mountain.....	...	+2	-8	+3	-4					
Pacific.....	-7	-8	+3	-4	-2					
United States.....	+9	-8	+8	+1	-3					

**Monthly Sales of Automotive Jobbers
incl., Tire and Tube Wholesalers***

All Data Are in Millions of Dollars

Month	1960	1959	Per Cent Change
Jan.	\$ 374	\$ 352	+ 6.15
Feb.	383	333	+15.01
Mar.	418	375	+ 8.87
Apr.	449	392	+14.54
May	443	389	+13.88
June	469	429	+ 9.32
July	427	419	+ 1.91
Aug.	472	405	+16.54
Sept.	467	428	+ 9.11
Oct.	469	439	+ 6.83
Nov.	447	429	+ 4.20
Dec.	413	379	+ 8.97
Total—12 Months...	\$ 5,231	\$ 4,841	+ 8.06

**Monthly Sales of Franchised Car
Dealers***

All Data Are in Millions of Dollars

Month	1960	1959	Per Cent Change
Jan.	\$ 2,577	\$ 2,531	+ 1.81
Feb.	2,670	2,450	+ 8.98
Mar.	3,038	2,921	+ 4.00
Apr.	3,120	2,492	+25.20
May	3,054	3,033	+ 0.69
June	3,075	3,198	- 3.85
July	2,467	2,903	-15.02
Aug.	2,615	2,772	- 5.88
Sept.	2,324	2,305	+ 0.82
Oct.	2,688	2,956	- 9.07
Nov.	2,633	2,284	+15.28
Dec.	2,483	2,177	+12.68
Total—12 Months...	\$ 32,714	\$ 32,472	+ 0.74

**Monthly Sales of Gasoline Service
Stations***

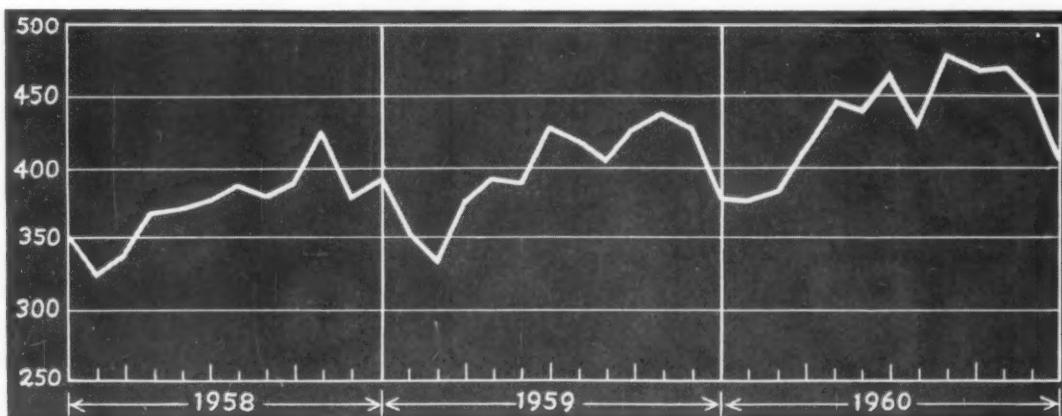
All Data Are in Millions of Dollars

Month	1960	1959	Per Cent Change
Jan.	\$ 1,356	\$ 1,282	+ 5.77
Feb.	1,286	1,197	+ 7.88
Mar.	1,368	1,318	+ 4.35
Apr.	1,457	1,348	+ 8.09
May	1,489	1,427	+ 4.34
June	1,525	1,450	+ 5.17
July	1,587	1,516	+ 4.68
Aug.	1,568	1,504	+ 4.26
Sept.	1,471	1,419	+ 3.66
Oct.	1,508	1,462	+ 3.01
Nov.	1,455	1,433	+ 1.53
Dec.	1,506	1,437	+ 4.80
Total—12 Months...	\$ 17,594	\$ 16,783	+ 4.77

* Estimated by the Bureau of the Census.

**MONTHLY SALES OF AUTOMOTIVE WHOLESALERS—
INCLUDING TIRE AND TUBE WHOLESALERS**

(All Data in Millions of Dollars)



Automotive Service Equipment

Continued from page I

to note that—in its recent study—the A.S.I.A. found that automotive service equipment is the sixth most important line to the average jobber, in terms of volume out of thirty-one different lines studied. For the large wholesaler, equipment ranks second in importance.

This, then, is not only big business for the manufacturers in the industry, it is big business for the jobbers, as well. Its importance to their total sales volume provides one convincing answer to the question as to whether or not the market lends itself to proper cultivation and development through jobber channels. It certainly does. Indeed, the automotive jobber—especially if he has outside salesmen—is rather uniquely well-situated to handle service equipment successfully. His relationship with the dealers, garages, and others in his area in the sale of parts and accessories, and the frequency of his contacts with them, puts him in an ideal position to keep abreast of their equipment needs. The jobber is exposed daily to the equipment market, whether intentionally or otherwise. But whether or not he capitalizes on this exposure depends on other factors we shall examine. After all, if the grass is so green on that side of the fence, why aren't more of the cows grazing over there? Or have they been chased out by the bull?

Although I was not appointed or elected as the spokesman for the Automotive Service Equipment Industry, I accepted this assignment to speak to you today in the knowledge that I would be dealing with broad concepts rather than with the specific problems or interests of any particular segment of the Industry. As a result, in order to prepare these remarks and to be assured of maintaining an objective viewpoint, I made arrangements several weeks ago for a survey to be conducted among 800 of America's top-

rated automotive jobbers by a professional organization. At the same time, we also made a survey of manufacturers in this industry. In both instances, the response was better than average and gave a good cross section of opinion on the various problems which confront the industry today.

Right here, I would like to say that I see no indication either in the survey results or elsewhere of any manufacturer wanting to eliminate the automotive wholesaler from his distribution pattern. I feel very strongly that every manufacturer will cooperate to the best of his ability with the wholesalers who are loyal and who give some evidence of a willingness to risk some expense and invest some sales energy to make an impact on the equipment market.

I have made a brief summary of the reasons given most frequently in our survey of equipment manufacturers for the failure of some jobbers to sell equipment successfully. Here they are:

1. Salesmen not sufficiently forceful or creative—inadequately trained—require assistance to close equipment sales.
2. Sells equipment through parts men—unwilling to develop specialized sales approach.
3. Salesmen unable or unwilling to conduct demonstrations.
4. Unwilling to stock equipment.
5. Not adequately equipped to handle service adjustments and repairs on equipment sold.
6. Does not have attractive and realistic time payment plan.
7. Handles too many competing lines of same equipment item.

Now, from these criticisms we can draw a pretty clear picture of what is necessary, in the opinion of these manufacturers, for a jobber to provide

in order to be successful in this business. Certainly the jobber who merely makes equipment available to his trade—but does nothing beyond that to develop sales—is not going to find his equipment volume satisfying to himself, nor will he be able to satisfy the manufacturer he represents. The equipment sale requires creative salesmanship. It requires that the jobber's salesman, who is constantly exposed to the equipment needs of his customers, be alert enough to recognize those needs and skilled enough to convert them into sales. If this salesman, however, is held to a tight time schedule and to a predetermined number of calls per day on parts and accessories sales, the pressure he is under makes it impossible for him to do this type of creative selling. This is why manufacturers, and jobbers who have tried it, favor specialization in equipment selling—drawing upon the leads provided by parts men and others, but turning them over to an equipment specialist to develop the order.

It is, likewise, true that equipment selling is most successfully done through demonstrations. If we understand this fact, we then recognize how important is the training of men, the development of their skill in conducting effective demonstrations, and, also important, the availability at all times of equipment from the wholesaler's stock to use for demonstration and display.

And then, we are all aware of the need for adequate finance arrangements in selling to the automotive trade. Although some types of automotive service equipment can pay for themselves out of additional profits in very limited periods, they do represent fairly substantial investments to the average purchaser. Somebody has to be able to provide the source of money to the operator on reasonable terms so that he can afford to take the plunge.

These, then, are some of the basic requirements which a

Continued on page VII



Forty-five Blackhawk Automotive Division regional and territory managers are shown at the Division's recent national sales conference at Milwaukee, Wisc. Held for four days, the conference covered an array of subjects to implement the session's theme for this year, "Second to None in '61."



Major General John Worley McConnell, left, Middle-West regional director of OCDM smiles as he hands transistor radio to Cities Service dealer Richard E. Green, center. Ed Main, Puro-lator regional distributor, holds CD poster and nods full approval to plan that enables service stations to help public in time of disaster. Presentation was made in Beech Grove, Indianapolis, Ind.



Attending the first meeting of the AC Spark Plug 1961 National Distributor Council in Flint, Mich., are sixteen automotive parts distributors from 13 states. Council members meet with top AC executives to discuss design, manufacture and marketing of AC products. In its seventh year of operation, the council is a national advisory group selected each year from among warehouse distributors handling automotive products sold by AC.

N-A-P-A Conferences for 1961

The first of a series of N-A-P-A National Business Conferences to be held in 1961 will take place in Des Moines, Iowa, March 19-21 inclusive, at the Fort Des Moines Hotel. The start of this first series was announced by E. J. Muldoon, Vice President and General Manager of the National Automotive Parts Assn.

Jobbers from Des Moines, Chicago, Milwaukee, St. Louis and Kansas City areas are expected to attend. Also in attendance will be executives of all manufacturers supplying N-A-P-A warehouses. Other meetings will take place in San Francisco and Denver later in the year.

Gould-National Completes Acquisition of Wilkening

Albert H. Daggett, Chairman of the Board of Gould-National Batteries, Inc., reports that Gould-National has completed its purchase of all of the capital stock of the Wilkening Manufacturing Company of Phila., Pa.

The company had previously disclosed that this transaction was under way. Wilkening, with annual sales of about \$5,500,000, is a long-established manufacturer of piston rings sold under the names "Wilkening" and "Pedrick." Gould-National will coordinate the manufacture and distribution of these rings both in the United States and Canada with other Gould-National products.

Robert E. Wait, Jr.

Robert E. Wait, Jr. died last month in Los Angeles. Funeral services were held in Jonesboro, Arkansas. Wait, 61, was vice president of the Casite division of Hastings Manufacturing Company, Hastings, Michigan.

His death, occurred while attending the International Automotive Service Industry Show.

Automotive Service

Continued from page V

jobber must be prepared to meet if he wants to be successful in this field. It is a highly competitive field and, in some areas, a pretty rough-and-tumble market. In spite of this, it is a very rewarding business for those who are equipped to handle it properly. There are wholesalers represented in our survey whose equipment business runs as high as 40% of their total volume and who tell us that it is a profitable business to be in.

APRA Announces New Service to Members

A brand new service has been established for its members by the Institute of Transmission Rebuilders, a division of the Automotive Parts Rebuilders Association.

The first of a series of practical, down to earth, technical reports to be issued on a monthly basis has been sent to Institute members. These reports are prepared especially by a transmission engineer in Detroit from material emanating directly from original equipment manufacturers.

In addition, an experienced technical committee edits the material so it is unnecessary to read pages and pages of dealer material in order to find the information sought.

Roy L. Burton

Roy L. Burton, who for 17 years was Executive Secretary of the Automotive Exhaust Research Institute, died suddenly last month at his home in Rocky River, Ohio. Mr. Burton who was 68, had retired from the Institute last April. Burton, began his automotive career with the General Motors Corp., in 1931.



The Automotive Undercoating Manufacturers Association, Pleasant Ridge, Michigan have elected new officers for the 1961 fiscal year at their annual meeting held recently in Cleveland. Elected were: president, G. R. Widger, (photo) president of Tuff-Kote Asphalt Products; vice-president, H. E. Hutson, president, Gibson-Homans Company; secretary, N. P. Hudson, manager of Lion Oil Company; treasurer, C. N. Cox, manager of special products div., Pittsburgh Coke and Chemical Co.



The customer whose car is up on your lift isn't going anywhere. For the moment you have his undivided attention and interest. Therefore, you have an unequalled opportunity to sell him additional services. Your lift will let you show him why these services should be performed. That's the essence of a new campaign being sponsored by The Joyce-Cridland Co.



INDUSTRY MEETINGS

March 20-22—Motor Vehicle Maintenance Conference, Univ. of Washington, Seattle, Wash.

March 26-28—Iowa Automobile Dealers Assn. Meeting, Hotel Fort Des Moines, Des Moines, Iowa.

April 13-15—43rd Anniversary National Truck, Trailer & Equipment Show, Great Western Exhibit Center, Los Angeles, Calif.

April 23-25—Automotive Trade Assn. of Virginia meeting, John Marshall Hotel, Richmond, Va.

April 27-29—Upper Midwest Automotive Trade Show's Service Clinic, Minneapolis Auditorium, Minn.

April 30-May 2—Michigan Automotive Wholesalers Assn. meeting, Pantlind Hotel, Grand Rapids, Mich.

May 11-13—Pennsylvania Automotive Assn. meeting, Hilton Hotel, Pittsburgh, Pa.



Leo Durocher signs his contract to pinch-hit for Bill Stern on the Monroe Sports Reel over 375 Mutual Broadcasting System stations at 5:30 p.m. EST, five times a week. Jack Eddy, West Coast Division sales manager for Monroe Auto Equipment Company, represents the sponsor.

Motor Age's

WHO'S WHO



Henry Ishizuka has been appointed vice president in charge of finance and administration of Maremont Automotive Products, Inc. Prior to this appointment he was controller and assistant treasurer.



Jeff Shea has been named product merchandising manager for The Electric Autolite Company's Autolite, Robat and Prest-O-Lite automotive replacement batteries.

Stillman Reed and **Stephen Szaban** have been appointed assistant sales managers for Van Norman Machine Company.



Russell C. Flood has been named general manager of Schrader-Scovill International Division, which was formed recently to co-ordinate all overseas manufacturing and marketing operations of Scovill Manufacturing Company, Inc.



Earl A. Branton has been appointed a territory manager for The Columbus Parts Corporation. His territory will be in Alabama, Mississippi and Western Florida. The company is a wholly-owned subsidiary of The AP Parts Corporation.

Joseph P. King has been appointed to the new post of advertising manager of Lee Filter Corporation.

William M. Walker, Jr. has been appointed general manager of United Motors Service, Division of General Motors.

Allen R. Hotchkiss has been appointed director of training for the replacement sales division of the Electric Autolite Co.

Robert P. Budler has been appointed public relations director of Thor Power Tool Co., and its subsidiary firms.

M. R. Graybiel has been appointed assistant sales manager of the Replacement Division of McCord Corporation.



Herbert A. Fotheringham has been named sales planning manager of the Automotive Division of The Electrical Storage Battery Company. He has been staff assistant to the Division controller since Feb. 1960.

E. H. Reichel has been appointed the new manager of the Wagner Electric Corporation's New York Parts and Accessories branch office. **J. P. Miller** has moved to the position of manager of the company's Boston office, formerly held by Reichel.

The appointment of three new vice presidents for Perfect Circle Corporation has been announced. They are: **G. R. Baer**, vice president—Operations; **A. M. Brenneke**, vice president—Engineering; and **W. J. Platka, Jr.**, vice president—International.



George Lau has been appointed manager of the customer demonstration department of Binks Manufacturing Company. He has been with Binks, as assistant manager of electrostatic spray painting equipment department, and as a customer service representative in the automatic equipment department.

Paul E. Peterson has been named a territory manager for Merit Mufflers. He will cover sections of Arkansas, Illinois, Kansas, Missouri, Oklahoma and Texas.

Raymond J. Labyak has been appointed the Grizzly Brake Division district manager of the Washington—Oregon—Idaho-Western Montana area.

Kenneth B. Hawthorne has been appointed general product manager of the U.S. Tires Division, United States Rubber Co.



George B. Larkin, Jr., sales manager for The Weatherhead Company's automotive aftermarket products in Ft. Wayne, has been relocated to the company's headquarters at Cleveland.



Joseph K. Decker has been appointed equipment sales manager for AC Spark Plug Division of General Motors. He has been director of purchasing since 1955 and succeeds **O. F. Frost**, recently named an assistant general sales manager at Buick Motor Division.

MOTOR AGE

newscoop

*Wedge Shaped Cars
Gas Economy Claims
Dealers' Ads Checked
AMC Misses Sales Goal
Cost Cutting At Chrysler
Tax Increase Coming?
Wage-Hour Expansion*

In the days ahead HERE'S WHAT TO LOOK FOR !!!

(Items gathered and edited by Ed Janicki, Bill Montgomery and Neil Regeimbal)

"Wedge Shape" Cars Seen At Chrysler

LOOK FOR HIGHLY UNUSUAL STYLING features on Chrysler Corp. cars next year.... The "wedge shape" look conceived in corporation's newest dream car, the Plymouth XNR, may appear on production cars sooner than expected.

The XNR drastically alters accepted car styling by putting streamlining features off-center and concentrated around driver.... For example, highest point on both deck and hood is left-off-center of car, in line with driver.

Many prototypes with off-center styling are currently seen at Chrysler's proving grounds.... One unusual design incorporates three tail lamps in left rear fender and one in the right fender.... Some sources say Plymouth and Dodge will pick up that treatment for their 1962 cars.

Municipalities Like Compacts

MANY MUNICIPALITIES WHICH SWITCHED to compact cars like them.... Latest favorable report comes from Phoenix, Ariz.... It now operates 63 compact cars and pickups in five departments.

Cars have now travelled over 400,000 miles.... Latest figures show operating costs of the compacts ran only 2.60 cents per mile.... This is compared with 4.67 cents per mile for standard models, or a 54 per cent lower over-all cost per mile.

As compact cars become older, operating costs are expected to rise.... This is due to normal repairs and possible greater gasoline consumption.... However, these costs should still remain well below those of the standard models, many municipalities feel.

Dealers Should Push Late Model Used Cars

SOME DEALERS BELIEVE TOO MUCH emphasis is being placed on sale of lower-priced new cars and not enough on late model used cars.... Result: lower profits.... One dealer points out that he made a profit of only \$120 on a new car deal when he could have made \$350 if his salesman had put customer into a late model used car.

"Better judgement should be utilized by dealers in helping customers determine whether to buy a new or used car," says this dealer.... "It's not enough to push just new car sales.... Remember that new car sales can push your used car inventory right through your walls and off your lots."

Neil Regeimbal's Washington Almanac

There's an outside possibility that the federal gasoline tax will be permitted to drop back to 3 cents a gallon after all . . . Congressional leaders



Neil Regeimbal
MOTOR AGE's News
Editor, Wash., D.C.

are trying to find some other way to scrape up the extra \$11 billion needed to finish the highway building program, even though President Kennedy is supporting former President Eisenhower's plan to boost the tax another $\frac{1}{2}$ cent to $4\frac{1}{2}$ cents . . . Possibility of adding extra taxes on trucks, particularly the larger ones, is getting the most study now.

Union members have been forbidden to picket a retailer just because he sells products of a manufacturer involved in a labor dispute . . . The National Labor Relations Board has ruled that "don't buy" picketing violates secondary boycott provisions of the 1959 Labor Management Relations Act . . . The NLRB says such picketing coerces an employer to cease doing business with the manufacturer involved in the union dispute.

Gas Economy Claims Toned Down

CAR COMPANIES ARE TONING DOWN on gas economy claims . . . Chrysler Corp. recently joined other makers in agreeing to cease claiming that its Valiant gives 30 miles to the gallon . . . Other companies are refraining from any further such claims as a result of action taken by the Federal Trade Commission.

FTC Eyes Small Dealers' Advertising

SMALL DEALERS DOING BUSINESS in only one state will have to watch their advertising if they want to keep federal government from snooping into their operations . . . Federal Trade Commission had decided it can exercise authority over a firm engaged in strictly local business if the firm advertises in newspapers and other media which cross state lines, such as radio and television. FTC says that circulation of this advertising tends to lure customers in from other states, thereby putting the firm in interstate commerce.

SBA May Be In For Shakeup

SMALL BUSINESS ADMINISTRATION may be in for a shakeup . . . Democratic majority members of House Small Business Committee recently branded agency's policies as "unduly strict" and "a detriment" to federal small business loan program. They charged that SBA approved only 47 per cent of loan applications in last fiscal year, smothering others in red tape, delays and strict credit requirements.

AMC Misses Sales Goal For January

JANUARY RAMBLER BUYERS missed out on a \$25 U.S. Savings Bond under company's new progress-sharing program . . . That's because American Motors did not quite hit its sales goal for that month . . . But AMC was highly hopeful that February would produce better results.

AMC paid out \$600,000 to buyers in December . . . Bad weather throughout the country in January was blamed for a decline in sales that month . . . It was first time in 40 months that AMC sales failed to set a record.

Steady rise in Rambler sales over that period has pushed Rambler from 12th place to 4th place in industry sales . . . At the same time, its share of the market has climbed from 2.5 per cent to 7 per cent.

Cost Cutting Program At Chrysler

RECENT CONSOLIDATION OF PLYMOUTH and Chrysler-Imperial division field sales forces increases speculation that the two car divisions eventually will be merged.... Chrysler Corp. is now in the midst of a heavy cost-cutting program.... Recent move is a major step in its reorganization and retrenchment program.

Company says move will bring increased efficiency in dealer-company business relationship.... Future business contacts with Chrysler-Plymouth dual dealerships now become basic responsibility of one sales field force and its reps.

E. M. Braden, formerly general sales manager, Chrysler-Imperial Division, was named general sales manager of the new Chrysler-Plymouth sales organization.... Robert B. McCurry, Jr., former general sales manager of Plymouth Division, was named director, field operations.

More Cars May Be Dropped Next Year

AT LEAST TWO CARS in higher-priced series and one in medium-priced class will be dropped next year.... Sales of particular cars have not come up to expectations the last two years.... Factories feel it's best to discontinue them.... Reshuffling within those price groups will result in more lower-priced models emerging at low-end.

No Major Tooling Plans At S-P

STUDEBAKER-PACKARD HAS DECIDED against an all-new car for 1962.... Although company made money last year, it has no plans at this time for any major tooling.

Present Lark will undergo a minor facelift once again.... No major changes are planned by company's new president, Sherwood Egbert.... Company admits that it is working on a smaller, four-cylinder car.... However, no decision has been made to bring it to market.... Strong possibility that it will emerge as a 1963 model.

Taxes May Be Increased

PRESIDENT KENNEDY'S PROPOSED EXPANSION of government welfare programs will mean an increase in taxes if Congress goes along.... About \$2.8 billion a year in higher payroll taxes for both business firms and workers would have to be collected to finance program.

Ed Janicki's Detroit Report

Like the late Edsel, Ford's two new small cars, due to hit the market within the next year, are getting an abundance of advance public-



Edward Janicki

*MOTOR AGE's News
Editor, Detroit*

ity . . . Many engineering details of the two cars have "leaked" out over the past year.

There will be more speculation during the coming months . . . But no official confirmation from Ford itself . . . However, hints that both cars are in the works have come from Ford Division General Manager Lee A. Iacocca who says "Ford will have cars both bigger and smaller than the compact Falcon," and Ford Vice President K. D. Cassidy, who admits the company is giving "serious consideration" to a new small car.

Right now, this much is certain: two cars are in the final planning stages . . . They have been labelled the "Canadian X" and the "Cardinal" . . . The "Canadian X" will be a neat V-8 job built on a 115-inch wheelbase chassis . . . It'll become Ford's "standard size" car by 1965.

Minimum Wage-Hour Expansion Fought

A BLOODY FIGHT IS DEVELOPING over President Kennedy's minimum wage-hour expansion program.... President hoped to whip measure through Congress in a hurry.... Opposition from business, Southern congressmen, and some economists is stronger than once thought, however.... Measure asked by Kennedy would raise the minimum from present \$1.00 an hour to \$1.25 an hour in several steps.

Gas station workers would be covered if station or chain grosses more than \$250,000 a year.... They would have to be paid minimum, but premium pay for overtime would not apply.... All employees of a car dealer grossing over \$1 million a year would also be covered, including the overtime requirement.... But car and truck salesmen would be exempt from mandatory overtime pay.

Auto Production Expected To Be Up In March

ON THE AUTO PRODUCTION SCENE January and February were poor months.... But there are rays of sunshine peeking through for this month (March).

Auto producers are scheduling some 475,000 units for March.... This is compared with a projected 375,000 units last month.... It's expected, however, the industry will wind up the first quarter about 8 or 9 per cent under last year.

Through mid February auto production totalled 564,440 units.... This compared with 1.0 million for same period last year, a 44 per cent decline.... Most makers were off anywhere from 30 per cent to more than 60 per cent.... Ironically, in reverse of what some call an "economy trend," most high priced makes, including Chrysler, Lincoln and Cadillac, held up relatively well.... Chrysler was off 19 per cent.... Lincoln only 4 per cent and Cadillac 21 per cent.

Larger Wheels For Compacts

SMALL THINGS ARE GETTING BIGGER.... Take wheels, for example.... They were shrunk to 13-in. diameters on compacts.... In most cases they were made smaller to conform with general styling of the car.... Nothing to do with function.

Many buyers are now complaining that the 13-inch wheels are too small.... Rural drivers say the car hits bottom too easily.... So what to do? You go to larger wheels.

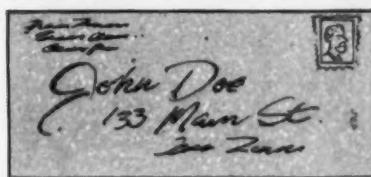
Buick announced that it is making 15-inch wheels available as an option on compact Special. Reason: buyers complain there's not enough road clearance with the 13-inchers.... Another maker—Chrysler—switched from 14 to 15-in. wheels on the 300 to provide better brake cooling.

Interest In Safety Belts Revived

CHRYSLER CORP. IS TRYING TO REVIVE interest in safety belts.... To encourage using the belts, company is offering them at about half former price.... Cost to the dealer will be \$6.35.... It is hoped he will offer them on a non-profit basis, with only a slight charge for installation.

Chevrolet charges its dealers \$7.77 for safety belts.... Ford belts are factory-installed and wholesale delivered price for a set of two belts is \$16, or roughly \$8 each.

Letters to the Editor



Floor Plans Requested

Dear Editor:

I am giving some thought to the building of a two car garage with an office area to be used as a used car garage for a used car dealer. Probably a design similar to a service station would be satisfactory. Do you have any free designs, that you could furnish to me that might be helpful?

Willard D. Wolf,
Union City, Indiana

Dear Editor:

In the waiting room of my business are the monthly copies of your magazines. In the near future I anticipate building a larger and more modern Bumping Painting Shop and I certainly could use any information that your engineers may have acquired or care to give, especially in relation to the lay-out and equipment of the paint booth and the immediate areas. Can you help?

Don W. Munro
Detroit 38, Mich.

Dear Editor:

I have become a recent reader of your magazine Motor Age. I am at present in process of opening my own radiator shop. I would appreciate a reference to a possible past copy of your magazine or any possible floor plans that you may have available at this time. Thank you.

R. Carl Dittman
Ashland, Ohio

Dear Editor:

From reading your "letters to the editor" pages of Motor Age, I see that you have available plans and specifications for garages. I would be interested in obtaining plans, etc. for a small garage that would handle from 2 to 4 cars at a time. Anything you might have on floor layouts would also be appreciated for I plan on building a small garage in Sierra Vista, Arizona.

Roy L. McPherson
Sierra Vista, Arizona

Dear Editor:

I plan to build a nice building size 55' x 80' of cinder block. I specialize in alignment, balancing, rebuilding front ends brake relining and some body work. I will have a frame machine and a front end machine. I have two wheel balancers and heavy truck balancer, drum lathe and wheel straightener. Would like some help on planning layout and door arrangement. Thank you.

Bennett Body Shop
Tifton, Georgia

Dear Editor:

I need some suggestions regarding floor plans. At present I have my garage in a 50 x 100 feet building. I intend putting up another concrete block building, 60 x 100 feet, alongside my present garage to take care of our increase in business. I intend to lease out 3000 square feet for mechanical repairs, and also to install a frame repair depart-

ment in my garage. The frame department would be a one man section. At present I use three bodymen and two painters. I hope to increase my staff by at least two more men. We do a preponderance of small foreign car work, but I expect to increase our American car work, hence, the new larger building. I am quite satisfied with the arrangement I have sketched. Can you help me? Any suggestions will be appreciated.

Barri Auto Works
Alan Barri

We are pleased with the continuing response for information on floor plans. We are forwarding materials which should prove a help. (Ed.)

Shopkeeping Reprints

Dear Editor:

We certainly are pleased to have a place in your excellent article on building construction in the December issue. A number of our people have asked if reprints of the article "Manual Of Good Shop Keeping" are available. If they are, we are interested in a sizable quantity for dealer organization. If not, we would like very much to obtain twenty-five extra copies of the December issue for our own sales organization.

T. G. Bennett, Asst. Gen. Mgr.,
Advertising & Sales Promotion
Inland Steel Products Company



A TEXAN SPEAKS UP

on Vehicle Safety

This Texan is convinced that every mechanic inspector is

By Riley Kennedy, Dallas, Texas

AN old friend is sore at me. His feelings are hurt; his pride is damaged because he thinks I forced him to adjust his brakes before issuing him a safety "sticker" for his windshield. He could stop, sure, but only after his brake pedal almost hit the floorboard.

"But I have power brakes," he argued. "So long as I can stop okay, why so much pedal?"

"At least an inch of reserve is required," I told him. "Less than that could cause trouble. And . . ." I tried to explain, but he was too embittered to listen. I can only hope he will somehow understand the reasoning behind it all.

You see, our State (Texas) has a compulsory annual vehicle safety inspection law. The inspection is performed in designated privately owned shops and service stations. The Department of Public Safety is responsible for administering an enforcement of the enactment. They, in turn, examine and qualify men at these various business houses to function as mechanic inspectors.

Tolerant Law

It is a tolerant law. No gimmicks or unreasonable demands are made upon the public. No governmental agency fattens its purse, as thought by so many, for the State's share is minute indeed. It was enacted for just one purpose: to promote safety on our highways and streets. Nothing more.

So that little "sticker" is symbolic of many efforts to help erase the tragical and ever mounting atrocities of our highway accident toll. Only a small piece of glued paper, yes, but behind it many tales could be woven.

Inspection

contributing to highway safety

Tales of bloodshed and horror; of property damage, demolished autos, mangled human bodies and far too many deaths.

Ten years ago, when my State first began these inspections, we in the auto industry thought of the enactment as a nuisance. Just more red tape; further taxation and state control. A waste of our legislators' time; same for the mechanics who had to perform the hated service.

Our industry's prestige hit bottom in the motoring public's attitude, too, and we were publicly criticized for bill padding; openly accused of having too powerful lobbyists down at the capitol. The word "flat rating" became a household one, rather than just shop lingo. Perhaps the then new statute was a bit unreasonable. It embodied many requirements which the public just wouldn't stand still for. Some of them, such as tire tread depth, the thickness of brake lining, correct alignment and proper exhaust system, have been abolished from the inspections. In looking back, one wonders if they were unreasonable.

Likewise, perhaps there was too much chance at padding the repair work. All mechanics, like other folks, are not exactly above reproach. At any rate, we were all blamed and stood condemned for wrongdoings, which the very nature of the law provided, yet of which only a handful of men were guilty.

Statute With Changes

So time rocked on. The statute remained as such, but with many changes—mostly a softening and diminishing of requirements involved. Pressures were exerted, no doubt, to bring about these changes. We free Americans detest being forced into anything. This is our basic and fundamental way of life, and may it thus remain forever. But in being born free, we were not endowed with any privilege to

Continued on page 64

The impact of compacts

A four-man panel discussion digested from the

Products We Sell Are "Perishable"

By ARTHUR H. KENNY

**Chairman, 1961 NADA Convention Committee,
NADA Director for Northern California,
Vallejo, Calif.**

This program will be confined to management considerations as they relate to the impact of the so-called Compacts. In doing so, it is not intended to minimize the necessity for dealers . . . to exercise a higher degree of efficiency in all areas of business management . . .

In the retail automobile business today a higher percentage of the products and services we sell are in a true sense of the word "perishable"—probably more so than in any other business. Our new cars, our used cars, our daily inventory of man hours in the service department, our accessories, and to some extent our parts are all perishable in the sense that the item in inventory that is not sold today is of lesser value, or no value, tomorrow. This to some extent has always been true but it is more true today as a result of product multiplicity.

The most significant contribution to multiplicity in product has been the introduction in one full swoop, of the so-called compacts. This is the single phase of the problem which we wish to consider today—"Fitting the Compacts Into Dealer Operations at a Profit."

Now for a quick review:

1. The total automobile market is good and will be good.
2. In the aggregate the dealer profit is not satisfactory.

3. Multiplicity of product—particularly the introduction of compacts—has increased the perishable nature of our business and the problems related to profitable operations.

4. A new look—a new concept of management methods and procedures must be developed at both factory and dealer level to insure industry wide stabilization and profit.

5. Here to present ideas and suggestions in management, designed to lead to the problem solution, at the dealer level, are three retail automobile dealers.

We're in Greatest Guessing Game

By ED KOSSMAN

**President, Kossman Buick Company, Cleveland,
Miss. and NADA Director for Mississippi**

The problem of fitting the Compacts into dealer operations at a profit, which I have been asked to discuss, is that of parts and service.

At the outset, I would like to make it clear that I do not pose as one who has the answers to the problem or the wisdom to forecast precisely what the future holds for us in this area. During my 36 years in the business, I have lived through changing conditions and operated under almost any circumstance one might visualize in this business—but the present conditions, in my opinion create management problems which are far beyond anything previously experienced.

Today we are in the greatest guessing game the industry has ever known, and the compact

Continued on page 114

on DEALER PROFITS

discussions at the N.A.D.A. Convention

Optimistic About Future

By TOM COSTELLO

President, Costello-Kunze Ford, Jennings, Mo.

We must merchandise whatever we have to sell. There are some 36,000 dealers in the United States all having a similar product to sell. Certainly, some have brighter chrome work than others, but they are all basically automobiles. The successful dealer is a successful merchandiser. He is a dealer who does something more or does something different than his competition does.

We have seen it this year with Ford, who was first to come out with the 12,000 mile-12 month guarantee. I like it, because it's a new concept of merchandising, a new idea. I know that there is mixed reaction to the new warranty, but I think it will benefit every one of our customers and tie them closer to us for future service.

Some dealers say that in merchandising compacts, you should separate them on your showroom floor or put up a separate showroom for them. I don't necessarily subscribe to this theory, but you must merchandise them—put them out in an attractive display.

In your advertising, sell your product and your company. Do not try to "gimmick up" your advertising. Gimmicks will only bring you bodies, but good advertising will bring you good prospects.

We have tried many promotions in our dealership, and one we used several years ago, in the summer, was quite successful. As you know, St. Louis summers are pretty hot.

Continued on page 114

Compacts Will Pass On

By PAT HYNDMAN

Vice President & Gen. Mgr., San Diego Auto Lease,
San Diego, Calif.

Editor's Note: Mr. Hyndman spoke from notes, comparing the similarity and differences between the dealership and the lease company. He explained why people accept or reject compact cars, based on a survey of his market area of prospective buyers of compact car owners, standard car owners and lease company customers in both sizes of cars. He described the favorable attitude of banks and finance companies toward compacts. He concluded:

We feel that the reason compacts have been so successful is that the cars with which they compete (that is, two, three and four year old cars) were too costly to maintain and were too large and unwieldy. This is not true of current model standard cars. Also, we feel that vacation traveling is not so important. Much of it is done by air today, even with whole families, and people refuse to buy a family car based solely on its vacation use. Psychologists suggest that another reason is a sense of guilt for the affluence we have enjoyed in this country compared to the rest of the world.

Our basic prediction is that the compacts, as we know them today, will pass. We say that because the manufacturers are alert and will bring the standard size car into a degree of trim and compactness which will satisfy the mass market.

The ART of Selling Volume Service

West-Side Chicago independent builds business with aggressive customer follow-up and direct mailings

AN imaginative color-coded card file helps make bi-monthly direct mailings to customers pay off for Albany Park Service, on Chicago's west side.

According to Don Derebey, partner in the business with his brother, Dick, the file has two big advantages. First, it shows at a glance when customers were in for service last without even pulling the cards to check names or dates. Second, it eliminates cross-filing, or an extra set of files, by incorporating this date-of-service feature in the regular alphabetical service file.

It works this way. When service tickets are made out, the order is duplicated onto a card which will end up in the permanent file when the work is done and the car delivered. These cards go into the permanent file daily on completion of work and provision for pay-



Above is shown Dick Derebey, co-owner.

ment. While most work is cash, the firm also services Diner's Club accounts.

As the cards go into the file, Derebey attaches a small, metal tab on the top. He has 12 colors of these tabs, one for each month. A few months later, April, for example, he might decide he needs a mailing piece to boost business. Having sent out a mailer the month before to the entire list on a spring special, he now wants a partial mailing to cars who haven't been in for four months or more for a general checkup. Looking in his file, he'll pull out all the cards he sees with orange tabs sticking up, knowing that the color orange represents cars that were in in December. So with just a glance, and without the extra time of checking names or dates, he can get all December cars in a matter of seconds. For a larger mailing, he can also pull the Novem-



Metal tabs on service cards are color-coded according to the month of service work done.

ber color, or the October color and so on.

"It saves a lot of time and trouble," says Derebey. "But it also is valuable because it makes it easy to do. If it were more difficult there would be a tendency to put it off or not do it at all, because there always is plenty of important work to be done."

Derebey's mailings usually go to from 800 to 1,000 at a time, bi-monthly or oftener during the slower winter months. In the summer there is neither time for it nor space in the garage. Occasionally he uses cards supplied by his suppliers, but more often he makes his own, mimeographing them on the back of a postcard. The ones that pull best, he reports, are those that offer slight price concession, such as \$1 per gallon off on anti-freeze to promote a winter tuneup at \$16.50,

Continued on page 64



Speedometer selling is easy with signs like this to remind customers of need for service.



Good, modern equipment and expert mechanics to handle equipment is a "must" in this shop.

Bob Schillo is service manager at Albany Park.



Modern Paint Dept. Highlights

Import car dealer duplicates original finishes by investing in modern equipment

By John K. Montgomery, Technical Editor



Spray booth is clean, well-lighted & ventilated.

Front portion of the booth is used for painting. Infra-red bake oven is the rear of the booth.



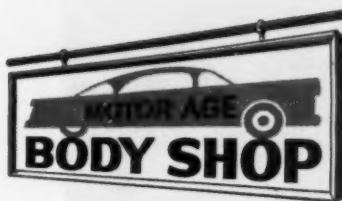
VOLKSWAGEN car dealers have worked hard during the past couple of years to make sure that they can service completely the automobile they sell. Import Motors of Chicago, one of the largest Volkswagen and Porsche distributors in the Chicago and northern Illinois area, offers an excellent example of how dealers have solved the service problem.

"We've got the spare parts problem licked," said Oliver Schmidt, owner of Im-

Paint is being dried in infra-red bake oven section. Rig with 54 infra-red lamps moves back and forth.



Dealership



Outside view of modern spray booth and bake oven.

port Motors, "and we recently invested quite a bit of capital to provide complete customer service to Volkswagen and Porsche dealers in this area."

Schmidt was referring to a large 20,000 square foot service center just north of Chicago's Loop. It is as complete and modern as any service center in the Chicago metropolitan area. It has a complete body shop, engine overhaul and repair shop, and facilities for fixing anything from a flat tire to repairing a major wreck. It includes a parts

department with a \$65,000 spare parts inventory.

"The newest feature that we offer our customers in this service center," said Mr. Schmidt, "is a complete spray painting facility. We knew that no service center is complete without painting facilities and we also knew that our customers would prefer to have their cars painted in a shop maintained and operated expressly for Volkswagens and Porsches. We, therefore, consider the money well spent."

Spray Painting Facility

The spray painting facility at Loop Import Motor's service center was designed, engineered and installed by Binks Manufacturing Company, Chicago. It includes a spray booth about 30 feet long and a complete infra-red baking oven adjacent to the spray booth. The two sections are arranged that an automobile can be brought into the one booth to the baking section. It is then removed from the opposite end of the facility through another set of large doors.

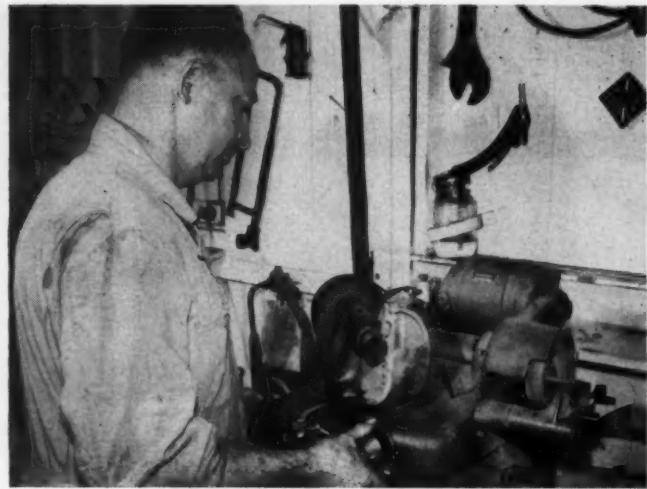
All other equipment, including Model 19 spray guns, were also supplied by Binks. The facility uses a pressure type system and the guns are fitted with one-quart siphon cups. Both primer and finished colors are applied in the booth. Segregation of the spray booth and baking oven section by a set of doors

Continued on page 118

Air is drawn into booth thru replaceable filters.
Exhaust drawn out exhaust stack on top of booth.



A Mechanic's Most Valuable Tool **HIS EYESIGHT**



Equipment should be placed on your workbench for comfortable posture and easy sight distance.

Recommended reading for everyone. An asset, ignored by many and lost forever by some

By James R. Gregg, O.D., Professor at the Los Angeles College of Optometry and Past President of the California Optometric Association

WHAT is the most valuable tool in your shop? Whatever your choice, chances are the one that *should* be at the top of the list—your eyesight—is not giving you the best possible performance unless you have given it special care and attention.

The reason for it is that automobile mechanics have some difficult seeing problems. Their work demands fast and accurate eyesight. It must be done in a big variety of seeing conditions. Recent studies of mechanics on the job revealed that many of them were not seeing as they should.

The cost of vision not suited to the job can be not only headache, eyestrain and fatigue, but errors and sluggish work as well. Most of it is unnecessary. But it's up to you to do something about it. You need to know about the special visual needs of your work and how to solve them.

Your work will be easier on your eyes and done better besides, if the seeing conditions are the best you can get. You should have plenty of light on every working area. General room illumination is seldom enough for critical seeing jobs. You need 20 to 30 foot-



Reaching over the fender requires working at 18 inches to an arms length, too far for clear sight with regular reading glasses.



Testing devices should be placed in a convenient seeing position whenever possible when working in the shop or service station.



Here is where single vision lenses or a double bifocal comes in handy. They provide sharp vision as close as 14 to 20 inches.



Working under the dashboard requires some of the closest seeing the mechanic must do. He must also guard against falling objects.

candles of light on your bench and for each task that calls for sharp vision. That's about the amount supplied by an uncovered 100-watt bulb $3\frac{1}{2}$ to 4 ft. away. Check your work light and the portable one you position near a repair job. Be sure it has an adequate bulb and a good reflector.

Glare can be as bad as not enough light. Don't use lights which shine directly into your eyes. Reflecting surfaces and bright windows can be distracting too. Outdoors it may even be worse. Shiny cars and wide paved areas can reflect annoying brightness. Besides that

you may be indoors and out dozens of times in a day's work. Your eyes can be in a constant dilemma adjusting to light and dark.

Tinted lenses, at least in moderate shades, may be the answer to this typical occupational problem. If prescription lenses are required, glare protection can be incorporated right in them. Otherwise, plain sunglasses may give relief from distressing symptoms of eyestrain from glare. But don't depend too much upon dark glasses. Be sure you need them and use them only as recommended.

Continued on page 97



TUNE UPS BUILD BUSINESS—Offer customers complete tune up services. Tell them how tuneups help improve gas economy and performance.



SLIP COVERS BRING BIG PROFITS—Sell your customers on Spring Conditioning. That means new slip covers to boost their morale and your profit.

MERCHANDISING IDEAS for successful selling

CASH IN ON GLASS REPLACEMENT—Keep a weather eye out for cracked or discolored windshields. Urge motorist to replace them.



MARCH is not too early to be thinking of ways and means to perk up summertime sales, sometimes known as "Summertime Doldrums." In the summertime a car dealer's thoughts should be on summertime sales promotions. Promotions during the summer can lick the doldrums. Here are some ideas on what the summer conscious car dealer can do to make the summertime siesta a thing of beauty and profit to himself and potential car buyer alike.

Here's how two car dealers in Edina, Minnesota reacted to the summertime season of the year, promotion-wise. Hartzell Motors of Edina feels that graduation time is the commencement of the summer merchandising season. It sends a personal letter of congratulations to every high-school graduate. With



OFFER PROFITABLE RADIATOR SERVICE—Be prepared to offer customers complete radiator repair service. Be on lookout for leaky radiators.



SAFETY CHECKS BRING NEW SALES—Check windshield wipers that look old and are scratching the glass. Check steering, alignment, and brakes.

Car dealers can avoid the Summertime Slump by planning summer promotions

By William M. Montgomery, News Editor

the congratulatory letter is a credit certificate worth \$25 towards a used car. A \$50 certificate is sent toward the purchase of a new one. This is in addition to any specific trade-in allowance which may be involved. Letters are dispatched via first class mail a month or so in advance of commencement exercises.

And this isn't all that this alert dealership does. A commercial photographer is hired to take a group photograph of the graduating class who assemble at the Hartzell showrooms. A print of this class "group shot" is available to any graduate who comes in after it, and at no extra cost. Original prints are placed on display in the showroom for proud parents and admiring friends or neighbors to observe.

Hartzell Motors doesn't overlook the fact

that juniors deserve their fair share of congratulations for advancing to their senior year. A special newspaper advertisement congratulates them. The ad advises that any member of the junior class may come in up to graduation time and upon identifying himself or herself, receive a \$15 credit voucher good on any used or new car purchase. Juniors are usually working at summertime jobs and can use a dependable used car for this extra money-making venture.

Hartzell schedules a High-Schoolers Show for the week prior to graduation. This is an evening when any highschooler, sixteen or over, and of course, others who are freshmen or sophomores, may come and look over a special collection of used "summertime job-hunting" specials. These are used cars in the \$150 to \$520 category. All are guaranteed to run, at least for the duration of summertime employment. An "Open House" is held, cokes are on the house and local TV celebrities are host. Parents are also cordially welcomed to the "Open House."

Finally, Hartzell Motors will run a newspaper advertisement just prior to graduation. This consists of brief "Help Wanted" ads

Continued on page 86



Rossi's service station in Pittsburgh is on a corner location with a long driveway. It has parking accommodations for twenty cars.



Service Station Builds Booming Business

This successful service station is building a thriving business by offering one-stop automotive services

SERVICE stations are more and more finding that "thars gold in them thar" auto repairs which they formerly used to turn away from their service bays. They are finding, by offering one-stop service repair work they increase their business and profits tremendously.

The Cities Service station of Camillo Rossi, located in Pittsburgh, Pa. is an example of what a service station can do in increasing business and profits when it offers the motorist complete automotive repair service. The service station has been operated successfully

by Rossi for the last five years. He has the able assistance of three employees who know their jobs well. One of the men is a full-time mechanic who works the day shift. The other two employees handle service station merchandising.

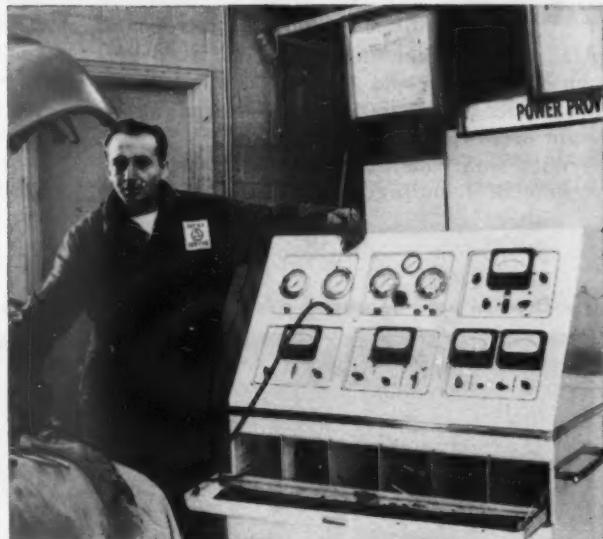
Services

The Service Station handles a complete line of service station products. It also is a Pennsylvania State Inspection Station. Approximately 375 cars are inspected each inspection period. The station has two bays and services



Each new repair job is begun in a clean bay. When a car is finished the work area is cleaned and grease or oil spots are removed.

Camillo Rossi is shown using up-to-date tune-up equipment on his customer's car. Expert tune-up jobs are one of the specialties of this station.



from 10 to 12 cars per day. All jobs are scheduled in advance. Rossi believes in giving his customers one-stop service by taking care of all their automotive needs. He believes that the service work has had a great influence on his gasoline sales, which is evidenced by the fact that the gallonage has doubled since his taking over the station.

Equipment

The station is at all times kept up to date with the latest in tune-up equipment. Tune-up and brake work are most featured.

Although there is heavy traffic in and out of the bays, you can walk into this station and find it orderly at all times. This can be attributed to the good housekeeping followed by Rossi and his employees at the station.

After every use, all hand tools are cleaned. All the repair equipment is returned to the tool cabinet immediately after use. There is plenty of room for all tools and when new tools are purchased they have definite storage places. Each new repair job is begun in a clean bay. When a car is finished, the work

Continued on page 98

CAR DEALER doubles his air conditioning volume

By Terrence J. McCabe, Feature Editor

AUTOMOTIVE air conditioner business of Don Drennen Motors, Chevrolet-Buick-Cadillac dealer, Birmingham, Ala., has been doubling each year. Last season the concern sold some 200 air conditioners and its service business runs at the rate of eight or 10 cars a day.

With this volume, the concern has a real system of handling both sales and service.

Sales are handled through the parts department with A. D. Miller, assistant parts manager, in charge. He puts the emphasis on "selling" the air conditioners, rather than merely carrying them in stock.

The fully equipped service department for air conditioners is under the management of Howard M. Daniel, who is a refrigeration specialist by experience and training. He has

Don Drennen puts the emphasis on "selling air conditioners" and not just stocking them.



Belief that customers want comfort in the summer as well as the winter pays big dividends to dealer in air conditioner sales and service

assistance in installing the air conditioners but handles most of the service himself.

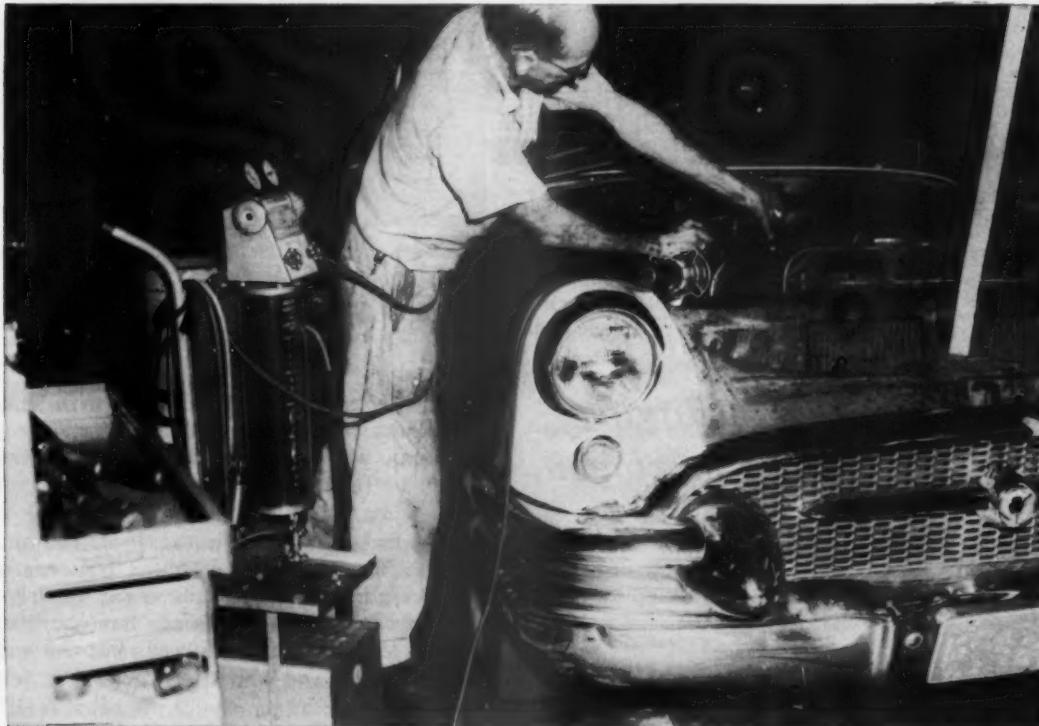
Air conditioner service is enormously simplified by use of a "service station on wheels." This portable equipment which can easily be wheeled from one car to another includes a vacuum pump, a charging cylinder of freon gas and testing gauges. This means that scales to weigh the gas and hot water

to heat the gas to make it flow are no longer needed. The charging cylinder holds five and one half pounds or much more than the three pounds needed for a usual charge.

Other equipment in the department includes an electric leak detector. One of the common causes of malfunction on the part of a car air conditioner is gas leakage. Most

Continued on page 110

This "service station on wheels" simplifies the servicing and charging of the systems.





This chassis has just been reinforced to insure complete safety to the car's driver.

BUILDING SAFETY Into Stock Car Racing

By Fran Hernandez

Director of Racing
The Electric Autolite Co.
Toledo, Ohio

*Reworking and modifying
stock car insures maximum
safety for the driver*

STOCK car racing is a hobby with some and a business for others. Whatever it may be, a hard professional approach should be taken. Its needed not only to win but to stay alive.

For professionals like those at Daytona that travel around 150 mph the business of racing begins with selecting a car to drive. Most of the stock car veterans have built up product loyalties over the years but the success of others and sometimes even a hunch, will enter into their choice. Otherwise it's



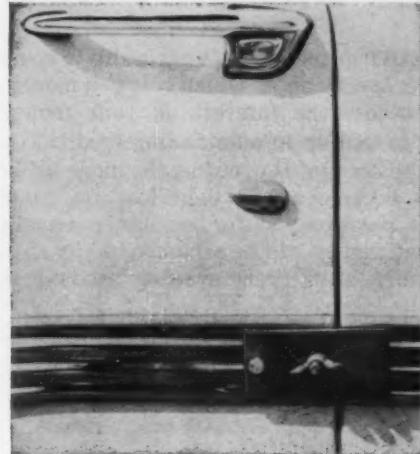
To insure extra safety steering parts are magnafused and additional shocks are added.



View shows how the driver is protected by welding a cage inside to serve as a roll bar.



Shoulder harness and seat belts fasten to the frame and protects drivers from being injured.



View of the side of the race car shows how the doors are bolted closed as a safety precaution.

usually determined by the horse-power of the relative makes and their adaptability to racing.

Adaptability to racing includes the power to weight ratio; styling for performance; availability of parts for racing; and, the co-operation of dealers and manufacturers.

I think power to weight ratio is an obvious criterion and certainly styling for performance needs no explanation to this group.

Availability of parts for racing would include the optional speed kits made available

for some models by the factories and also the popularity of the particular model with the specialized speed shops.

Assuming the driver has made his choice, among the models of the last three years there are three categories of changes he will make in the stock car regardless of make or model. These modifications are:

Increased Speed
Increased Safety
Increased Handling Ease

Continued on page 122

Collection Letter Ideas

Buying on the cuff increases sales.....and also increases the collection problems

CREDIT granting leads naturally to some overdue accounts which cost you money. You lose the interest on your money while it is tied up in outstanding credit. The longer the account is overdue, the more likely it is to become a bad debt loss for your business. Sales may suffer because customers owing you money will be ashamed to buy anything more until their overdue account is paid.

Here are several collection letter ideas designed to help you collect your overdue accounts:

COMMEMORATIVE STAMP



This collection letter has either a stamped return envelope or a loose unused stamp with the letter. It will be more effective if the stamp is one of the large size commemorative stamps. The letter reads:

*Dear Mr. Jones,
I am a philatelist (fancy name for a stamp*

collector). My main interest is in used United States stamps cancelled at different times.

You can help me increase my collection—two ways.

First, please return the enclosed stamp to me on (date—a few days in advance) because I will need that cancellation date for my stamp collection.

Second, enclose your check for (dollar amount) to bring your account up-to-date.

May I hear from you on (date)?

Very truly yours,

If your local post office does not have any commemorative stamps, you can use unusual stamps. For instance, you could use eight $\frac{1}{2}$ ¢ stamps or a $2\frac{1}{2}$ ¢ and a $1\frac{1}{2}$ ¢ stamp to make up the 4¢ return postage for your customer's check.

THOUGHT PENNY



Enclosures in collection letters attract attention. The first objective of a good collection letter is to get it read. This letter idea has an inexpensive gimmick that will attract attention and get results. This letter reads:

Dear Mr. Jones,

The coin attached to this letter is a "thought penny."

I am sure you have heard the expression. "A penny for your thoughts." This thought penny is for one of your thoughts.

I would like to know when you think you can settle your account. It is only (\$00.00), but it is overdue.

When I know your thoughts on when you will pay, I can pass a similar thought along to the people I owe money to.

Keep the penny, but please let me know your thoughts.

Very truly yours,

You will need to attach the penny to your letter securely. Scotch tape is a simple solution. Also, you can ask your bank for bright new pennies to attract more attention and help bring in your overdue dollars.



Tax Savings Check List

Here's twelve questions to help you save money on your income tax

THE Internal Revenue Service has consistently stated that taxpayers should take all legitimate deductions. Yet, all accountants are aware of many opportunities for savings that business men fail to recognize when filing income tax returns.

Here are twelve questions to help you save money on your income tax for your automotive business:

MANAGEMENT DEDUCTIONS

1. Did you use part of your residence for business purposes during the year?

If you own your home, you are permitted to charge off a portion of your household maintenance expenses if you used part of it for business purposes. If you rent your home, you can also charge off a portion of your rent plus your household expenses.

The portion of expenses you select for deduction is based on the part of your residence that is used for business purposes. For example, one room in a six room house used for an office at home would mean one-sixth of your expenses could be deducted from your income tax.

2. Did you pay an accountant to audit your books during this tax year?

All professional accounting services rendered for your business by an accountant are fully deductible from your income tax. This also includes any expense incurred in the preparation of your income tax returns.

3. Did you attend a business convention or conference this year?

Management-minded men who attend business conventions know the value of this activity. The Internal Revenue Service recognizes the value of this and permits you to deduct your normal travel, entertainment and registration expenses at business conventions and conferences.

4. Did you seek any legal advice this year?

Any legal expenses you incurred in the operation of your business can be deducted. Also, you can deduct legal fees in connection with income-producing or investment property.

5. Did you pay any magazine subscriptions this year?

Not all magazine subscriptions can be deducted from your income tax. However, the Internal Revenue Service does recognize the

Continued on page 125



New Products Shopping Center

Voltage Regulator

Regulators are set and sealed at factory

Wiesner Motor Parts Company: A new voltage regulator, which is set and sealed at the factory is announced. The complete line for both American and Foreign (Renault & Volkswagen) in the 6 and 12 volt series consists of 24 units—12 of which cover about 95 percent of the popular applications, company states. Write: Wiesner Motor Parts Company, 43-12 Broadway, Long Island City 3, New York.

Radiator Pressure Cap

Insurance against scalds and burns



Stant Manufacturing Company: A new Lev-R-Vent safety type radiator pressure cap is being

marketed. It is said to be insurance against scalds and burns of arms and hands when removing cap of a boiling radiator. Lev-R-Vent is built to original equipment standards into the Stant Everseal pressure cap mechanism. Simply lift the lever and steam and heat jet through the radiator overflow tube. When cap is turned to remove, lever snaps down at a touch. Write: Glen A. Johnson, Adv. Mgr., Stant Manufacturing Co., 1620 Columbia Ave., Connersville, Ind.

Gasoline Filter

Designed for small two or four cycle gasoline engines

Carter Carburetor Division of ACF Industries, Inc.: Zip-Disc gasoline filter engineered for small two or four cycle gasoline engines, has been introduced. The nylon body is transparent. This permits inspection of the micro-ceramic filtering disc for contaminants. A Zip-Disc filter installed in the water line of an automobile windshield washer, it is said, assures trouble free operation. Write: M. G. Johnson, Director of Aftermarket Sales, Carter Carburetor Division of ACF Industries, Inc., Dept. 801, 2840 N. Spring Ave., St. Louis 7,

Missouri, or 'phone Jefferson 1-2950.

Impact Wrench

Operates off low air pressure



Thor Power Tool Co.: A new air-powered automotive impact wrench has been developed. The new Thor Model WA4 wrench can operate at maximum efficiency off the low 50 pounds per square inch pressure of small compressors, and yet retains its efficiency at the high pressures of 110 p.s.i. or more required by other wrenches, company claims. The wrench is designed for driving or removing nuts, bolts or screws as well as for chucked drilling, grinding, sanding, and tapping in automotive repair shop and service station operations. Write: Thor Power Tool Co., 175 N. State St., Aurora, Ill.

Shock Absorber Tool

Fits all makes of shock absorbers



K-D Tool Co.: A new shock absorber tool that is said to fit all makes of shock absorbers has been put on the market. It is called the Universal Shock Absorber Tool (K-D No. 465). The head end of the tool is designed for a tight but easy-on-the-hand grip. It has three wrench openings which will fit any one of the stud-ends on different make shocks (including Delco) so that the piston can be held stationary while the mounting nuts are tightened. Tool has an internally threaded end which reaches down through the mounting hole and threads onto the shock piston stud-end. This allows it to be pulled into mounting position. *Write: C. Paul Myers, V. P. Sales, K-D Tool Co., 526 N. Plum St., Lancaster, Pa., or 'phone Express 7-8176.*

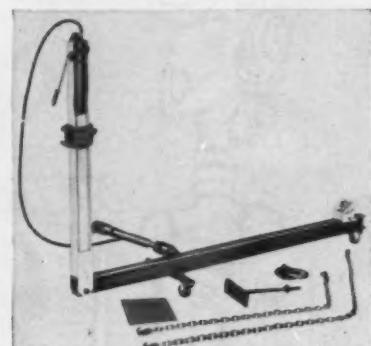
Spray Booth

Features a disposable curtain

Binks Manufacturing Company: An automatic dry spray booth that collects paint overspray on a disposable curtain is introduced. Called the "Dispo" booth, it collects paint overspray on a disposable cloth curtain mounted in the booth where filters are normally installed. The cloth is mounted on rollers so that it can

be rotated when the exposed area is saturated with paint particles. The Dispo booth is designed to exhaust approximately 300 CFM of air per square foot of cloth area at a maximum of 3 in. resistance pressure. As resistance pressure builds up, a pressure differential switch operates a motor drive to advance a new section of clean media. When the cloth is fully used up, it is discarded and a new 150-yard roll is installed in its place. This design eliminates the need for

be adjusted anywhere along the vertical beam. Heavy-duty swivel casters permit rolling the unit to



the job. *Write: Blackhawk Automotive Division, 5825 W. Rogers St., Milwaukee 46, Wisconsin.*

Bleeder Tank

New adapters and tool tray

Eis Automotive Corp.: Now being marketed is a one-man pressure brake bleeder. It comes with a set of up-to-date adapters. The adapters are designed to service 1960 Ford Products, 1960 Chevrolet and GMC trucks as well as Oldsmobile with the special power brake. A self-sealing, quick-disconnect coupler is also available with this bleeder tank and for those Eis Bleeder



pumps, piping, water, water treatment, sewer connections, and booth and stack cleaning. *Write: Binks Manufacturing Co., 3114 Carroll Ave., Chicago 12, Ill.*

Bantam Dozer

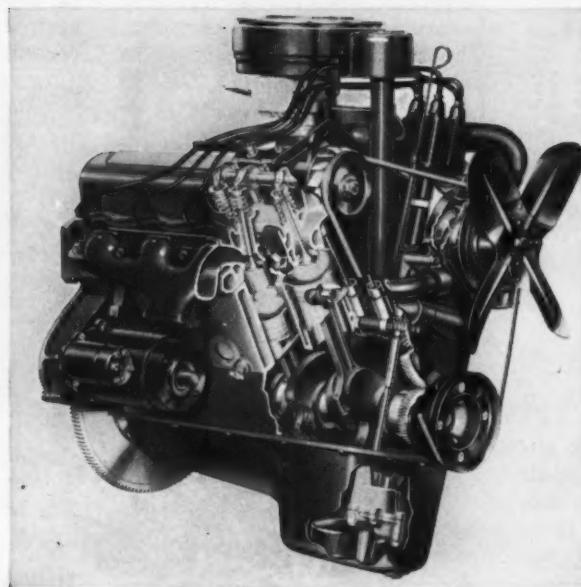
Provides up to four tons of pulling power

Blackhawk Automotive Division: A small unit for automobile sheet metal pulling has been introduced. Named the EK-7 Bantam-Dozer, it is an all-steel version of the Pull-Dozer. Unit is powered with Bantam Port-o-Power to provide up to four tons of pulling power. Featuring a 6-foot horizontal beam and an adjustable anchor post, the EK-7 is suitable for body, fender and all sheet metal pulls. The pull can



tanks already in the field. The new Eis Bleeder Tank (T1200-7) is fitted with a slide-on, all metal tool tray. *Write: Eis Automotive Corp., N. Main & High Sts., Middletown, N.J.*

Continued on page 91



Cutaway view of Comanche engine.

New Comanche 4-Cylinder Engine

Engineering highlights of International Harvester's newly adopted principle of splitting a V-8 to produce a 4-cyl. engine

By Joseph Geschelin, Engineering Editor

FROM the standpoint of the engine builder there are major economies in the newly adopted principle of splitting a V-8 in two in order to produce a four-cylinder engine for a lower powered vehicle. First, it is perfectly feasible to machine components of the four over the transfer line originally installed for the V-8. This reduces initial investment to a very modest figure. Second, many components of the four are completely interchangeable with those in the V-8.

This is precisely what was done at International Harvester Company in launching

the Scout vehicle. For the 152-cu. in. power-plant represents the right bank of the Harvester 304-cu. in. V-8. The major parts affected in this maneuver were the cylinder block, crankshaft, and camshaft. Interchangeable parts between the V-8 and the Four are pistons, rings and pins; connecting rods; cylinder head and valve mechanism; and accessories. The Four retains the same valves, valve seat inserts, Roto-Cap valve rotators for exhaust valves, and hydraulic valve lifters.

Continued on page 125



BOXED
KITS
OF FITTINGS
NUTS, BOLTS

**to install
MOTOR
MOUNTS**



**FOR QUICK EASY INSTALLATION
BETTER BUY BOTH**

A perfect combination to make motor mount installations less time consuming has just been created for YOU! Next time you buy replacement motor mounts be sure to ask for the handy "time-saver" installation kits. This is a separate box containing all the nuts, bolts, fittings, etc. to make your job easier, faster. Don't buy one without the other. You won't have to worry about shearing a bolt when removing a stubborn mount.

Call your favorite jobber.
He stocks a complete line of
Motor Mounts and Matching
Installation Kits.

**TIME IS MONEY
...SAVE IT!
BUY MOTOR MOUNTS
AND INSTALLATION KITS
IN COMBINATION**



DOAN MANUFACTURING
A DIVISION OF ANCHOR INDUSTRIES, INC.
1725 LONDON ROAD • CLEVELAND 12, OHIO

Detroit Report...

NEXT: U.S. Cars In 3 Sizes

Tooling orders placed recently by Ford and Chevy back up earlier rumors that both plan to offer bigger-than-compact but smaller than standard cars next fall.

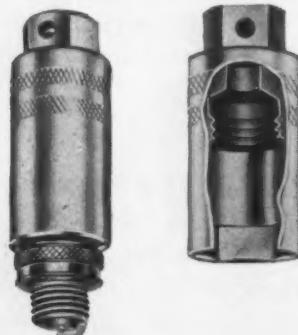
The prototype of the Ford is about 197 inches long, has a 115-inch wheelbase, and weighs about 2800 pounds. That makes it about a foot shorter and 1000 pounds lighter than the current full-size Ford, and about a foot and a half longer and 400-500 pounds heavier than the 1961 Falcon. The new job will not replace either of those, but will cut into the number of full-size Ford models to be produced.

The new Chevy reportedly will have a 114-inch wheelbase, two inches longer than the B-O-P compacts, with which it is expected to share some body tooling.

A 244-cu.-in. V-8 being tested at FoMoCo's Arizona proving grounds may power the in-between Ford. The prototypes of this engine have experimental sand-cast aluminum blocks; but if the engine does go into the new model, it will be with a cast-iron block.

The new Chevy may get a new six-cylinder engine, but its design is difficult to pin down. Most "usually reliable sources" are betting on a no-nonsense short-stroke OHV in-line. The long-short types think Ed Cole, Chevy's boss, may have a V-6 up his sleeve. In either case, the engine will probably have a cast-iron block, like its Ford competitor.

Proto Improves Patented Spark Plug Sockets



With the new re-designed neoprene insert #5026RA, Proto's famous spark plug holds all types of new plugs positively . . . making cleaning or replacing of spark plugs quicker, without plug damage. The new insert lasts longer, has special grooves that grip all brass tips, as well as porcelain bodies.

The sockets, in either $\frac{3}{8}$ " or $\frac{1}{2}$ " drive have a hex opening of $\frac{13}{16}$ ". A special feature is the hex base so that the sockets can be turned with a standard end wrench, as well as with the correct ratchet or hinge-handle.

The Greatest

Automotive engineers are saying that the new Fram "Wear-Guard" filters are the greatest advance in engine protection since detergent oils. By keeping dirt, dust, and carbon from turning into sludge and winding up in the crankcase, Fram Oil filters effectively guard against engine wear and fuel waste. Fram is featuring a booklet in the April issue of POPULAR SCIENCE expounding these points.



Tests show that on an average, a dirt-clogged air filter can cut gas mileage by as much as 10%. A fresh Fram air filter can easily save up to 3 cents a gallon on every tankful of gasoline. Dirt, in any form, is murder on engine performance and life. As dirty sludge builds up, it plugs passages. Oil flow slows. Piston rings overheat, wear, shoot oil out of the exhaust as blue smoke. There's a big loss of power, and bearings overheat and fail. This sludge also gums action of hydraulic valve lifters. Plugs foul more readily. The engine misses more often. In a vicious circle, sludge forms and causes trouble that forms

more sludge. A Fram filter can save a car owner hundreds of dollars while helping the engine deliver every ounce of power it was designed to produce. Neglecting these vital filters is an expensive mistake, one that's always regretted after the damage has been done.

Topper Is Tops

The new Harley-Davidson Topper "H" engine and transmission are designed for new zip and zest. Engine compression has been raised to 8:1 . . . new larger carburetor . . . larger air intake . . . new polyurethane foam plastic air cleaner

Gus Wilson's

A regularly monthly feature of Popular Science

Usually it's Gus Wilson, the wizard of the Model Garage, who is confronted with a mechanical problem and solves the mystery pronto. This month it's Gus himself who has a complaint—his shiny new compressor breaks down. He sends for Ed Swain, who sold it to him, but the hard-boiled service man who shows up in Ed's place is a very different POPULAR SCIENCE READERS

and tapered muffler make Harley-Davidson's Topper "H" really Tops!

You Pays Your Money . . .

Sometimes false economy costs more in the long run. Take "bargain batteries" for example. How much have you saved if you're late for work . . . throw in trouble and hours of aggravation and inconvenience and you haven't saved a thing.

The Delco Battery people are featuring the dependability of a Delco Battery as a real "buy" . . . sure-starting Delco Batteries will save you time, money and trouble.

Sitting upon a dealer's shelf,

from Popular Science

355 Lexington Avenue, New York 17, New York *Monthly*

Delco stays bone dry . . . until the dealer adds the fluid that gives it the "zing."

The Delco DC-12 has extra fluid capacity-hard rubber case-micro-porous rubber separators among other quality features. Delco is "Designers' Choice" for new cars and "Drivers' Choice" for replacements!

Compact Compact Gets Shelved

Plans to bring out a short-wheel-base, four-cylinder small car for '62 have been canceled in South Bend. Instead, Studebaker will put its

Model Garage



kind of guy. When he tries to give Gus a lesson in electricity, the sparks really fly.

Then the service man's car goes kaput—and Gus helps him out.

If you want to pick up some useful dope on voltage drop and electrical theory in general, read "Gus Meets With Resistance" in March POPULAR SCIENCE.

ARE YOUR BEST CUSTOMERS

money into restyling the compact Lark and Lark Cruiser.

Reason for the decision: The market for compacter compacts is too uncertain in this country to warrant the tooling expense at this time. Studebaker prefers to try to strengthen its position in the proven compact-car field and let other manufacturers do the pioneering and take the risks with smaller cars.

Big News From Corvair

The '61 Chevy Corvair now offers a choice of three transmissions.

Drivers can select the standard three-speed box, or the Corvair Powerglide and now the new floor mounted all synchro-mesh four-speed transmission. Essentially it's patterned after the design found on many a Corvette.

For the technically minded, Corvair's four speeds line up like this: first, 3.65:1, second, 2.35:1, third 1.44:1 and top 1.00:1.

A four-speed gearbox gives drivers an extra handful of pure driving sport.

Don't Forget the "Z"

Pennzoil is directing part of its selling theme to educating car owners to sound the "Z" in requesting Pennzoil for their cars.

Using Pennzoil Z-7 oil will give the drivers' engines the extra protection they need in hard, low-speed city driving . . . as well as on the highway.

In traffic, drivers only use $1/10$ of their autos' horsepower . . . means incomplete combustion, gasoline waste, sludge build-up and excessive engine wear. Result: total driving costs skyrocket. Pennzoil's Z-7 exclusive power ingredient stays active and keeps vital parts clean.

Like The Carefree Life?

If your family is like ours and likes to hunt, fish, go camping and boating, then you'll go for this newest idea in vacation fun . . . the modern Ford Econoline Pickup. The Ford Econoline Pickup is powered by the 144 Falcon Six engine—an engine that has proven itself in gas economy; and, has a big 7-foot box that carries over $1/2$ -ton payloads! A newly designed removable camper body is made of lightweight fiberglass that attaches to the pickup's box in a matter of seconds, is "just what the Doctor ordered" for fun-loving families like yours and ours!



Leading Automotive Advertisers Appearing in March

POPULAR SCIENCE

Pontiac
Tempest Compact

AC Spark
Spark Plugs

Ford Motor Company
Ford Cars

Holley Carburetor Co.
Carburetors

Pennsylvania Refining
Gumout

Champion
Spark Plugs

Buick
Buick-Special

Kendall Company
Motor Oil

Rochester-General Motors
Carburetors

United Motors Service
Delco Batteries

Chevrolet
Corvair Compact

Pennzoil Company
Motor Oil

Harley-Davidson
Motor Scooters

Ford Motor Company
Ford Trucks

AMERICA'S FOREMOST AUTOMOTIVE MARKET



Texan Speaks Up *Continued from page 39*

endanger the lives and property of our fellow citizens.

So while requirements were lowered, the number of vehicles climbed yearly with phenomenal gains. There are about twenty five million more today than ten years ago. Horsepower and its resultant potential speed have increased tremendously. About two thirds of our present vehicles are five years or more in age . . . yet we continue to ponder and squabble over safety.

Then why shouldn't we condemn any segment of our society who casts even one small shred of doubt toward any measure, compulsory or no, pertinent to safety and slaughter and shame.

We must help promote such measures; not only in our own city or state, but nationwide. There is no other way.

Statistics won't show all the suffering and heartaches—the human misery and frustrations—the financial burdens running parallel with our gruesome casualties.

But these same statistics clearly point up the fact of far less accidents in those states where inspection is required. (see *Motor Age*, Jan. 1961, p. 49)

Not being a great mathematician, this writer shies away from too many charts and graphs. But the figures don't lie when they show a situation such as this: Out of one

million recent inspections, three hundred seventy nine thousand vehicles were found faulty. Not great faults, perhaps, but twenty one percent had headlight trouble. Ten percent unsafe brakes. The other were minor and miscellaneous items—wipers, horns and other lights. Did I say minor? There's no such thing.

Would you like to have every fifth car you meet, on some dark and rainswept night, have faulty lights? If these percentages were broken down yet further, we would find that most of these bad lights are aimed too high.

And for every ten cars within coasting range of your own, would you relish the idea of at least one having faulty brakes?

"All you have to do is write out the sticker. My car is in perfect shape." Or, "You folks just serviced my car. You know it's okay." I have heard such comments as these, plus many others too numerous and some too foul to print, until at last I have become immune to any such idle chatter. I'm sure I have been cussed and discussed on many occasions by good customers, close or casual friends, fellow workers—yes, even relatives—because I wouldn't bend to their unreasonable demands.

These overtures are especially in evidence when the deadline date for new inspections is near at hand. These people have had sufficient

time (in my state, seven months, beginning in September and ending in April) for this service, but from pure procrastination have postponed it. The man performing this service should not help further their negligence and wrongdoings.

We must be firm in our convictions about safety and law; tolerant in simple mechanical explanations. We may lose a friend or customer occasionally, but it won't hurt much. We will gain great satisfaction, and other friends and customers because of a job well done in promoting safety.

I would abhor the thought of helping cause one small collision just because I failed to check a stop-light.

A mechanic may feel imposed upon, or discriminated against, when asked or told to qualify himself with the Motor Vehicle Inspection people. He may forebode the pinching amount on the repair order; particularly so if he is a commission man and the flagsheet is of vital importance.

But he will usually find it helpful, along with his other work, if he is alert and fair, yet firm in his belief about safety. Most of the needed repairs are quick jobs, (some of them "gravy") and command a fairly high flat rate. Brake adjustments, headlight aiming, stoplight switches and bulbs, and other minor services and repairs are the bulk of inspections.

Volume Service *Continued from page 43*

with work to be performed specified.

The mailings are successful mainly because customers have learned they can count on Albany Park service, according to Dick Derebey. Shop area is 100 x 100, square, with a large parking lot alongside for cars waiting service. Don runs the shop and Dick handles the wholesale parts business at the front. Service manager is Bob Schillo, a veteran of 15 years as a GM parts manager. In addition there are six mechanics. Average tenure is more than 10 years.

"That gives an idea of why customers come back," says Schillo, who does the hiring. "The fact that the men have been here so

long proves we mean it when we say we want only the best mechanics. In hiring we look for intelligence and experience both.

"But we improve it further by making specialists out of the men. Working on the same type of work all the time, they learn more and improve their own efficiency. We have two men who are tuneup specialists, and two others who are fully qualified for it when we get busy. One man is a brake specialist, one a carburetor specialist, one works only on transmissions, and the other man works the lube rack, plus mufflers, pipes and brake adjustments. The transmission man also is fully qualified to

handle the valves and clutches."

Both Schillo and Don Derebey go to all schools available, and most of the other men have been to at least one school. After school, sessions are held in the shop for the benefit of those who did not go, so all mechanics will stay abreast of the latest developments and techniques. "We've always been interested in the most modern equipment," Schillo says, "but we find many garages have modern equipment and don't know how to use it. Here the schools help us in teaching the men to use the equipment right, and we all work together to make sure we get the most out of our equipment. The machines will do a lot, but there has to be a man reading and interpreting it."



FREE

SAFE-T-GAGE

lets you show your customers

just how much **STOP** is left in their brakes



lets you accurately measure brake lining wear...

*Patent pending

- Shows customer just how much lining is left
- Adjusts instantly for accurate readings on either bonded or riveted lined shoes
- Proves whether brake lining is unsafe

- Gets wheels off cars
- Builds customer confidence in your integrity
- Dramatizes fact that your shop uses modern tools
- Helps you clinch every possible sale

**NEW SAFE-T-GAGE
MAKES RAYBESTOS
7-POINT BRAKE CHECK
EVEN MORE EFFECTIVE...**

Combine this revolutionary precision caliper-type gage developed by Raybestos engineers with the famous Raybestos 7-Point Brake Check and you have a real double-barreled selling plan. Now more than ever before you can make wheels off pay off.

Raybestos **7** **POINT
BRAKE
CHECK**

(includes adjustment)

1. Pull front wheels, SAFE-T-GAGE the linings
2. Check brake drums
3. Inspect front wheel bearings
4. Clean brake assembly
5. Check hydraulic system
6. Adjust brakes or recommend reline
7. Road test brakes

And remember: you get paid for every car you check!

NEW GAGE SHOWS WHEN BRAKES ARE DANGEROUS

Reline
four cars
and make...

PROFIT!

\$42.37*
PROFIT!

on brake lining alone...plus labor profit!

Best reason we know for promoting brake work: there's more profit in it for you. Do reline jobs on just four cars and you chalk up a profit of \$42.37 on the brake lining *alone!* And that's only the beginning . . . add to it the profit on labor and other correlated parts and you can see at a glance why we say brake business is big business—big profit business—especially when you use the revolutionary Raybestos Safe-T-Gage.

*Based on PG set suggested retail price

► *Look at the coverage you get with a BS-8-61 assortment!*

1 of 292-9

CHEVROLET 1958-51 Passenger Car & Station Wagon (rear)

CHEV. TRUCK 1958-51 ½ Ton (rear)

GMC TRUCK 1960-51 Series 100 (rear)

IHC TRUCK 1960-50 R, S, A100 (rear)

1 of 2002-55

FORD 1959-55 Passenger Car (rear)

FORD TRUCK 1961-48 F1, F100 (rear)

2 of 2005-20V

BUICK 1961 All (except Special) (front)

1960-58 All (rear)

1957-54 60, Century (f or r)

1957-53 50, Super (f or r)

1957-56 40, Special (f or r)

1957-52 70, Roadmaster (rear)

1955-52 40, Special (front)

1952 50, Super (front)

1951-40 60, 70 Series (f or r)

EDSEL

1959-58 All (rear)

1959-55 Station Wagon (rear)

1954-52 Station Wagon (front)

1958-57 Thunderbird (rear)

FORD 1961-48 F1, F100 (front)

HUDSON

1957-55 Hornet (rear)

LINCOLN

1953-52 All (rear)

MERCURY

1958 Medalist

1956-55 (rear)

1954-49 (front)

NASH 1957-55 Ambassador (rear)

OLDSMOBILE

1961-42 (rear)

PACKARD

1956-54 Clipper (rear)

PONTIAC

1948-42 All (front)

1 of 2006-11

CHEVROLET 1961-59 Passenger Car & Station Wagon (rear)

1958-51 Passenger Car & Station Wagon (front)

CHEV. TRUCK

1958-51 ½ Ton (front)

1961-59 ½ Ton (f or r)

GMC TRUCK 1960-51 Series 100 (front)

IHC TRUCK 1960-50 R, S, A100 (front)

1 of 2025-19V

CADILLAC 1951 (some)-50, 60 Series (f or r)

HUDSON 1957-55 Hornet (front)

LINCOLN 1953-52 Cosmopolitan (front)

MERCURY 1956-55 All (front)

NASH 1957-55 Ambassador (front)

OLDSMOBILE 1961-42 (front)

PACKARD 1956-54 Clipper (front)

1 of 2053-12V

FORD 1959-55 Passenger Car & Station Wagon (front)

DODGE TRUCK 1961-59 ½ Ton (front)

1 of 2006-10V

DODGE TRUCK 1961-59 ½ Ton (rear)

SEE PAGE FOR MORE DETAILS

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(14 in. x 20 in.)



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brake service Safe-T-Gage assortment

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Business Address _____

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Ship and bill through my distributor: _____

City _____ **State** _____

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man." He visits dealers display-
ing the Safe-T-Gage sign.

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1961 Tune Up—Alignment Specifications

MAKE AND MODEL	No. of cylinders Bore and (In.)	Maximum Brake H.P.	Spark Plug Make and Size (mm.)	ENGINE		TUNE-UP DATA						FRONT END ALIGNMENT			
						VALVES			IGNITION			Caster (Deg.)	Camber (Deg.)	Toe-in (In.)	
				Seat Angle	Clearance Tappet Operating	Inlet (In.)	Exhaust (In.)	Cam Angle (Deg.)	Spark Plug Gap (In.)	Timing	Steering Axle Inclination (Deg.)				
AMERICAN MOTORS CORP.															
Rambler...American (Deluxe & Super)	6-3 1/2 x 4 1/4	90	CA-14	45	45	.016C	.018C	.020	.035	3B	8	0 to 1/2P	1/2N to 1/2P	1/2 to 1/2	
.....American (Custom)	6-3 1/2 x 4 1/4	125	CA-14	45	45	.012H	.016	.02	.035	BB	8	0 to 1/2P	1/2N to 1/2P	1/2 to 1/2	
.....Classic	6-3 1/2 x 4 1/4	127	CA-14	45	45	.012H	.018H	.02	.035	BB	6 1/2	0 to 1/2P	1/2N to 1/2P	1/2 to 1/2	
.....Classic	6-3 1/2 x 4 1/4	200	CA-14	30	45	.012H	.014H	.017	.035	TC	6 1/2	0 to 1/2P	1/2N to 1/2P	1/2 to 1/2	
.....Ambassador	8-4 1/2 x 3 1/4	290	CA-14	30	45	Hyd	Hyd	.017	.035	TC	6 1/2	0 to 1/2P	1/2N to 1/2P	1/2 to 1/2	
CHECKER MOTORS CORP.															
Superba, Marathon	6-3 1/2 x 4 1/4	80	Ch-13	30	44	.014H	.014H	.020	.028	4B	7	2P	1/2P to 1/2P	1/2 to 1/2	
.....Superba, Marathon (Engine Option)	6-3 1/2 x 4 1/4	122	Ch-14	30	44	.017H	.023H	.020	.033	3 1/2B	7	2P	1/2P to 1/2P	1/2 to 1/2	
CHRYSLER CORP.															
Chrysler...Newport	8-4 1/2 x 3 1/4	265	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Windsor	8-4 1/2 x 3 1/4	305	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....New Yorker	8-4 1/2 x 3 1/4	350	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	1/4P to 1 1/2P	1/2P to 1/2P	1/2 to 1/2	
DeSoto	8-4 1/2 x 3 1/4	375	AL-14	45	45	Hyd	Hyd	.017	.035	5B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Dodge...Polaris (Engine Option)	8-4 1/2 x 3 1/4	265	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Dodge Dart...Seneca, Pioneer, Phoenix	8-4 1/2 x 3 1/4	145	AL-14	45	45	.010H	.010H	.020	.043	21 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Seneca, Pioneer, Phoenix	8-4 1/2 x 3 1/4	230	AL-14	45	45	.010H	.010H	.017	.035	5B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Seneca, Pioneer, Phoenix (Engine Option)	8-4 1/2 x 3 1/4	305	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Seneca, Pioneer, Phoenix (Engine Option)	8-4 1/2 x 3 1/4	325	AL-14	45	45	Hyd	Hyd	.017	.035	7 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Seneca, Pioneer, Phoenix (Engine Option)	8-4 1/2 x 3 1/4	360	AL-14	45	45	Hyd	Hyd	.017	.035	7 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Dodge Lancer...170, 770 Engine (Option)	8-4 1/2 x 3 1/4	101	AL-14	45	45	.010H	.020H	.020	.043	21 1/2B	7 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Imperial...Custom, Crown, Le Baron	8-4 1/2 x 3 1/4	350	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	1/2P to 1 1/2P	1/2P to 1/2P	1/2 to 1/2	
Plymouth...Savoy, Belvedere, Fury	8-4 1/2 x 3 1/4	145	AL-14	45	45	.004	.004	.020	.043	21 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Savoy, Belvedere, Fury	8-4 1/2 x 3 1/4	240	AL-14	45	45	.004	.004	.017	.035	5B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Savoy, Belvedere, Fury (Engine Option)	8-4 1/2 x 3 1/4	205	AL-14	45	45	Hyd	Hyd	.017	.035	10B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Savoy, Belvedere, Fury (Engine Option)	8-4 1/2 x 3 1/4	225	AL-14	45	45	Hyd	Hyd	.017	.035	7 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
.....Savoy, Belvedere, Fury (Engine Option)	8-4 1/2 x 3 1/4	350	AL-14	45	45	Hyd	Hyd	.017	.035	7 1/2B	6 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
Valiant...V-100, V-200	8-3 1/2 x 3 1/4	101	AL-14	45	45	.010H	.020H	.020	.043	21 1/2B	7 1/2	0 to 1N	1/2P to 1/2P	1/2 to 1/2	
FORD MOTOR CO.															
Comet...(Engine Option)	8-3 1/2 x 2 1/2	85	Ch-18	45	45	.018H	.018H	.025	.037	.034	BB	7	1P to 1 1/2P	1/2P to 1/2P	1/2 to 1/2
.....(Engine Option)	8-3 1/2 x 2 1/2	101	Ch-18	45	45	.018H	.018H	.025	.037	.034	BB	7	1P to 1 1/2P	1/2P to 1/2P	1/2 to 1/2
Falcon...(Engine Option)	8-3 1/2 x 2 1/2	85	Ch-18	45	45	.018H	.018H	.025	.037	.034	BB	7	1 1/2P to 2P	1/2P to 1 1/2P	1/2 to 1/2
Ford...Fairlane 300, Galaxie	8-3 1/2 x 2 1/2	101	Ch-18	45	45	.018H	.018H	.025	.037	.034	BB	7	1 1/2P to 2P	1/2P to 1 1/2P	1/2 to 1/2
.....Fairlane 300, Galaxie	8-3 1/2 x 2 1/2	135	Ch-18	45	45	.018H	.019H	.023	.037	.034	BB	6 1/2	1 1/2P to 2P	1/2P to 1 1/2P	1/2 to 1/2
.....Fairlane 300, Galaxie (Engine Option)	8-3 1/2 x 2 1/2	175	Ch-18	45	45	.018H	.018H	.015	.037	.034	BB	6 1/2	1 1/2P to 2P	1/2P to 1 1/2P	1/2 to 1/2
.....Fairlane, Fairlane 500, Galaxie (Engine Option)	8-4 1/2 x 2 1/2	220	Ch-18	45	45	Hyd	Hyd	.015	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
Lincoln Continental...Meteor 600, 800	8-4 1/2 x 3 1/4	300	Ch-18	45	45	Hyd	Hyd	.015	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
.....Meteor 600, 800; Monterey	8-3 1/2 x 3 1/4	309	Ch-18	45	45	Hyd	Hyd	.015	.037	.034	BB	6 1/2	0 to 1 1/2N	1/2P to 1P	1/2 to 1/2
.....Meteor 600, 800; Monterey	8-3 1/2 x 3 1/4	135	Ch-18	45	45	.018H	.018H	.026	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
.....Meteor 600, 800; Monterey (Engine Option)	8-4 1/2 x 3 1/4	175	Ch-18	45	45	.018H	.018H	.015	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
Thunderbird...	8-4 1/2 x 3 1/4	229	Ch-18	45	45	Hyd	Hyd	.015	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
.....(Engine Option)	8-4 1/2 x 3 1/4	300	Ch-18	45	45	Hyd	Hyd	.015	.037	.034	BB	6 1/2	1 1/2N to 1 1/2P	1/2P to 1P	1/2 to 1/2
GENERAL MOTORS CORP.															
Buick...Special	8-3 1/2 x 2 1/2	155	AC-14	45	45	Hyd	Hyd	.016	.030	.033	7 1/2B	7 1/2	5 1/2N to 1 1/2N	1/2N to 1/2P	1/2 to 1/2
.....Le Sabre	8-4 1/2 x 3 1/4	280	AC-14	45	45	Hyd	Hyd	.016	.030	.033	12B	9 1/2	5 1/2N to 1 1/2N	1/2N to 1/2P	1/2 to 1/2
.....Invicta, Electra, Electra 225	8-4 1/2 x 3 1/4	325	AC-14	45	45	Hyd	Hyd	.016	.030	.033	12B	9 1/2	5 1/2N to 1 1/2N	1/2N to 1/2P	1/2 to 1/2
Cadillac...60, 62, 63, 75	8-4 1/2 x 3 1/4	325	AC-14	44	44	Hyd	Hyd	.016	.030	.035	BB	6	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
.....Biscayne, Bel Air, Impala	8-3 1/2 x 3 1/4	135	AC-14	31	48	Hyd	Hyd	.019	.032	.036	BB	7 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
.....Biscayne, Bel Air, Impala (Engine Option)	8-3 1/2 x 3 1/4	135	AC-14	31	48	.008H	.018H	.012	.036	.036	BB	7 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
.....Biscayne, Bel Air, Impala (Engine Option)	8-3 1/2 x 3 1/4	170	AC-14	45	45	Hyd	Hyd	.019	.030	.036	BB	7 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
Biscayne, Biscayne Fleetmaster, Bel Air, Impala (Engine Option)	8-4 1/2 x 3 1/4	290	AC-14	45	45	Hyd	Hyd	.019	.030	.036	BB	7 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
Biscayne, Biscayne Fleetmaster, Bel Air, Impala (Engine Option)	8-4 1/2 x 3 1/4	360	AC-14	45	45	.008H	.018H	.019	.030	.036	12B	7 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
Corvair...F-85	8-3 1/2 x 2 1/2	80	AC-14	45	45	Hyd	Hyd	.019	.033	.035	7B	7	3P to 3 1/2P	1/2N to 1 1/2P	1/2 to 1/2
Corvette	8-3 1/2 x 2 1/2	230	AC-14	45	45	Hyd	Hyd	.019	.030	.036	4B	4	1 1/2N to 2P	1/2N to 1 1/2P	1/2 to 1/2
Oldsmobile...F-85	8-3 1/2 x 2 1/2	125	AC-14	45	45	Hyd	Hyd	.016	.030	.040	5B	7 1/2	1 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
.....Super 88, 98	8-4 1/2 x 3 1/4	325	AC-14	45	45	Hyd	Hyd	.016	.030	.030	BB	10	0 to 1N	1/2N to 1 1/2P	1/2 to 1/2
Pontiac...Catalina, Ventura, Star Chief	8-4 1/2 x 3 1/4	215	AC-14	30	45	Hyd	Hyd	.016	.030	.036	BB	4 1/2	1N to 2N	1/2N to 1 1/2P	1/2 to 1/2
Bonneville	8-4 1/2 x 3 1/4	235	AC-14	30	45	Hyd	Hyd	.016	.030	.036	BB	4 1/2	1N to 2N	1/2N to 1 1/2P	1/2 to 1/2
Tempest...(Engine Option)	8-3 1/2 x 2 1/2	110	AC-14	30	45	Hyd	Hyd	.016	.030	.036	BB	6 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
.....(Engine Option)	8-3 1/2 x 2 1/2	155	AC-14	45	45	Hyd	Hyd	.018	.030	.032	BB	6 1/2	5 1/2N to 1 1/2N	1/2N to 1 1/2P	1/2 to 1/2
STUDEBAKER-PACKARD CORP.															
Studebaker...Lark-8	8-3 1/2 x 2 1/2	112	Ch-14	45	45	.024H	.024H	.020	.030	.036	2B	6	5 1/2N to 3 1/2P	0 to 1P	1/2 to 1/2
.....Lark-8	8-3 1/2 x 2 1/2	180	Ch-14	45	45	.024H	.024H	.018	.030	.036	4B	6	5 1/2N to 3 1/2P	0 to 1P	1/2 to 1/2
.....Hawk	8-3 1/2 x 2 1/2	210	Ch-14	45	45	.024H	.024H	.016	.030	.036	4B	6	5 1/2N to 3 1/2N	0 to 1P	1/2 to 1/2

ABBREVIATIONS

—Left side only; right side, 0 to 1P.
—Left side only; right side, 1P to 2N.
AC—A.C. Spark Plug Div.

AL—Autolite.
B—Before top center.
C—Cold.
H—Hot.
Hyd—Hydraulic valve lifters.
N—Negative.
P—Positive.
TC—Top center.

THIS HANDSOME ADJUSTABLE OUTDOOR THERMOMETER

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WITH EACH CASE OF
TUNG-SOL
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Rugged—made of durable, all-weather styron
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Vibro-Centric action
speeds grinding!

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self-centering pilot assures
most accurate alignment!

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Fast and right—that's the kind of valve seat grinding you get with the Black & Decker Vibro-Centric System! And it's foolproof, too! You get a mirror-finish and correct alignment quickly, easily . . . every time!

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THE BLACK & DECKER MFG. CO., Dept. 5103
Towson 4, Maryland. (In Canada: Brockville, Ont.)

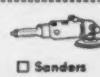
Please arrange for a demonstration of _____
 Please send me more information on _____

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

 Drills  Sanders  Polishers  Impact Wrenches



**BIG, BOLD GABRIEL SALES MESSAGES
IN ALL THESE TOP MAGAZINES... ALL
THROUGH THE PEAK SELLING SEASON!**

Sell Gabriel... the line with national magazine

This year we're pulling out all the stops to help you cash in on one of the biggest profit opportunities in the replacement market today! And we're backing up our national ad blitz with a barrage of free sales aids, including these three brand-new items.

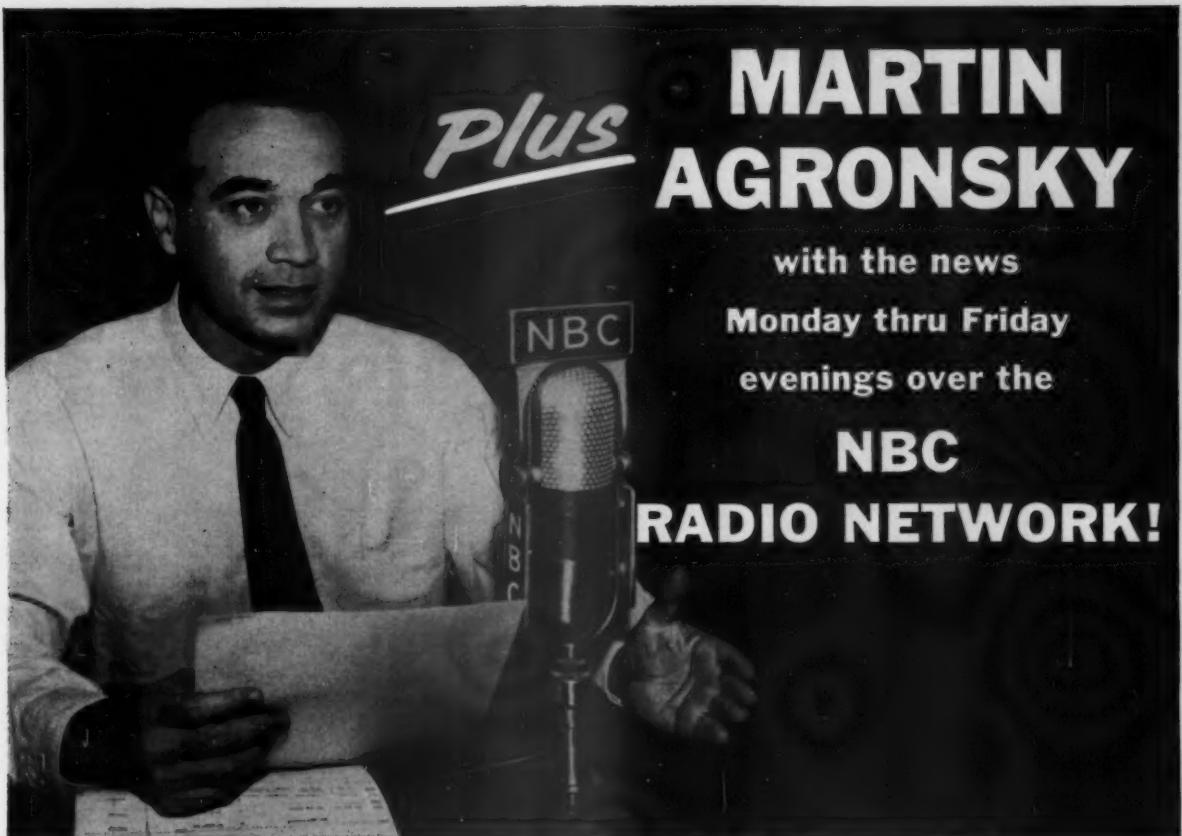
Permanent Metal Sign! A flange-type sign—of heavy-gage metal, with baked enamel finish—that can go on a wall, fence or pole . . . identifies you as a Gabriel Shock Absorber Specialist. It's easy to put up . . . helps you tie in with our national advertising. Most firms *charge* for signs of this type . . . but this one is yours free when you sign up as a Certified Gabriel Dealer.

Spectacular Window Display! This unusual display comes in three sections, and you may use one, two or all of them, depending on the size of your window. It

has extremely high visibility and will help make your place of business Gabriel Shock Absorber Headquarters!

Special Load-Absorber Display! This is a big, colorful stand-up display you can use on the floor, in a window, on a counter, or out on an island (it's made of weather-resistant Masonite). It features a full-scale illustration of a Gabriel Load-Absorber and is equipped with hooks so that you can actually display a unit if you care to.

There you have it! The market is there: half the cars that drive into your place of business need new shocks. And we have the product and the promotion to help you prove to yourself that shock absorbers represent just about the greatest profit potential in the replacement market today! Get *your* share of those profits . . . with Gabriel!



**that lays it on the line
and radio advertising!**



**The Gabriel Company
Cleveland 15, Ohio**

1960 New Passenger Car Registrations*

STATE	Buick	Cadillac	Chevrolet	Chrysler	Comet	De-Soto	Dodge	Ford	Imperial	Lincoln	Mercury	Oldsmobile	Plymouth	Pontiac	Rambler	Studebaker	All Others	Totals		
Alabama.....	518	221	3500	121	355	16	426	2665	21	37	269	638	456	662	500	116	889	11490		
12 Mos.	3646	1470	27753	867	2080	249	3807	20181	201	200	1856	4500	4432	4846	4563	1031	7466	88151		
Alaska.....	6	15	77	15	20	---	12	105	4	200	10	11	32	15	29	4	51	307		
12 Mos.	88	124	1067	88	111	18	110	1031	41	14	83	107	608	198	273	85	922	4966		
Arizona.....	139	88	1115	34	167	5	143	836	9	29	76	207	176	247	288	58	219	3337		
12 Mos.	1326	1139	10954	337	1212	107	2072	9367	111	227	1144	2092	2790	2645	3438	743	3890	43594		
Arkansas.....	71	28	479	12	43	3	67	397	2	5	32	88	67	103	75	12	71	1355		
12 Mos.	1541	742	12544	300	841	47	1917	10927	68	106	1085	2470	2216	2623	2095	589	2344	42525		
California.....	Dec.	2300	1719	14373	724	2234	119	2463	12671	231	489	1443	3256	3100	3393	3344	724	4653	57256	
12 Mos.	18647	17841	144978	6286	19209	1449	31317	143633	1910	2650	14557	27689	43765	32287	43265	10226	71746	631555		
Colorado.....	256	105	1627	81	151	9	194	1303	10	29	149	296	304	364	405	88	455	5820		
12 Mos.	2308	1214	17313	764	1361	100	3075	14251	148	225	1729	3195	3791	3650	4605	1197	4425	83472		
Connecticut.....	273	175	1636	124	290	13	318	1397	16	37	163	376	588	469	549	179	581	7151		
12 Mos.	2645	2288	22412	1490	272	354	5547	19672	232	285	2328	4717	8731	5308	8384	2276	11928	101824		
Delaware.....	76	39	517	19	32	6	94	339	5	6	31	116	80	73	80	15	86	1604		
12 Mos.	680	508	6005	235	366	101	1230	3964	39	55	447	1081	1520	1241	1059	279	197	20747		
District of Columbia.....	73	77	501	42	80	---	113	531	6	13	47	132	205	129	137	24	358	2486		
12 Mos.	665	840	6965	481	604	76	1616	5254	95	140	487	1546	2665	1660	1811	988	3829	29310		
Florida.....	926	804	5689	156	680	28	679	3888	56	129	330	1098	950	995	1113	257	1940	19608		
12 Mos.	7729	7055	50053	1960	5459	613	3038	46907	708	1067	3737	1027	13403	10635	12476	3071	3289	22283		
Georgia.....	222	112	1437	43	142	10	164	1164	6	20	70	278	279	303	194	46	390	4860		
12 Mos.	4136	1958	33104	981	2033	335	4620	28507	174	290	1947	5126	6940	8212	5119	1501	12586	117570		
Hawaii.....	52	31	438	26	42	---	28	308	2	2	14	68	196	67	42	1	162	1499		
12 Mos.	440	281	4564	221	326	17	760	3720	28	19	144	541	2662	447	622	255	3316	18383		
Idaho.....	136	60	466	37	64	10	125	367	6	12	66	142	70	146	187	37	151	2062		
12 Mos.	1060	536	4818	279	501	87	1378	3871	80	80	575	1200	1221	1506	2011	448	1591	21342		
Illinois.....	2648	1134	11563	676	953	62	1494	8072	150	245	1095	3285	2252	3590	2492	589	1600	41870		
12 Mos.	2230	11335	12487	5639	10084	1324	23167	88557	1143	1854	10552	27843	25319	34848	2785	7110	21588	44280		
Indiana.....	996	424	4124	218	362	59	629	3228	44	59	380	1273	115	1122	738	418	621	13590		
12 Mos.	9253	3728	49000	1921	3520	825	10081	37670	426	557	4273	12575	10414	1454	10470	561	8080	161674		
Iowa.....	620	255	4866	221	295	9	687	3755	29	35	149	165	2586	5364	8121	5485	1652	1454	3479	95437
12 Mos.	4415	1471	2760	1163	327	558	2214	146	148	206	267	262	212	60	199	4082	1185	22325		
Kansas.....	106	46	1184	38	97	5	171	958	9	17	119	206	267	262	212	60	199	4082		
12 Mos.	3708	1309	23022	825	1448	231	4229	19104	155	229	193	4333	4763	4881	5127	1358	4306	80842		
Kentucky.....	372	112	1790	52	135	17	195	1516	8	8	127	417	336	416	332	68	296	6196		
12 Mos.	3300	1068	20731	563	1491	257	3428	1674	108	124	1638	4341	4844	4621	4315	938	4668	72549		
Louisiana.....	378	161	2201	96	241	17	239	1873	25	33	186	521	286	539	349	85	462	7694		
12 Mos.	3432	1649	27619	836	1966	274	3263	22497	211	216	1869	5477	3873	6491	3919	1005	7406	92024		
Maine.....	99	51	639	35	63	1	114	391	6	8	51	81	115	123	180	84	172	2183		
12 Mos.	1031	511	8752	311	756	126	1560	8726	41	63	765	1090	2214	1625	2753	755	3163	11675		
Maryland.....	362	147	2626	213	213	47	404	2138	17	29	143	71	490	561	9195	1185	4042	4042		
12 Mos.	3916	1505	33607	1700	2460	490	2659	2522	256	240	2106	5032	10240	679	1686	9628	120365			
Massachusetts.....	418	233	2110	151	252	25	345	1923	23	45	176	584	554	452	734	124	571	8770		
12 Mos.	2340	1275	3773	443	1276	62	1458	8900	410	572	3228	9412	13270	8189	15797	2786	15188	170912		
Michigan.....	10271	10438	11324	2623	13989	1457	25919	105903	928	1679	14679	26121	2916	32100	26068	3864	18572	445740		
12 Mos.	686	261	3277	226	329	26	613	2656	35	39	393	905	706	825	774	182	509	12492		
Minnesota.....	6191	2413	34319	1707	2679	494	7256	28204	274	337	3413	8374	9014	8211	8864	2189	6406	131675		
Mississippi.....	227	80	1139	43	100	7	123	870	7	10	90	359	180	263	173	31	220	4042		
12 Mos.	2031	624	13013	385	648	126	1529	9703	86	85	603	2770	2358	2708	1830	593	2723	41862		
Missouri.....	700	268	4661	137	259	27	714	3740	22	33	353	877	1023	934	1466	15612	15612			
12 Mos.	6017	2608	46377	1390	2708	485	9457	35474	276	303	2881	8663	9737	9358	9475	16522	154910			
Montana.....	117	34	475	23	52	3	108	396	108	49	43	104	130	143	28	93	1875	1875		
12 Mos.	1188	493	5533	238	490	80	1489	4899	70	60	736	1328	1410	1183	1690	442	1479	22996		
Nebraska.....	251	143	1775	73	90	12	308	1515	10	8	186	381	328	362	280	62	217	6024		
12 Mos.	1048	15602	605	829	164	3445	13397	123	84	84	1406	2944	3226	3046	3512	721	2188	54544		
Nevada.....	30	34	187	18	51	3	51	170	5	15	27	51	67	68	61	17	107	882		
12 Mos.	252	334	2027	153	337	34	534	1983	43	127	444	490	711	778	715	199	1543	10704		
New Hampshire.....	78	26	461	20	45	2	66	300	2	9	35	74	69	96	151	45	203	1682		
12 Mos.	809	376	6582	225	641	63	1403	5305	39	75	673	916	1503	1077	2342	736	3161	25926		
New Jersey.....	987	739	4762	539	507	48	788	3753	88	125	441	1187	1356	1241	1336	1166	19401	19401		
12 Mos.	10523	8596	65531	5614	6254	1623	18690	51406	1068	1132	5709	14404	21635	16557	19419	4520	21653	272504		
New Mexico.....	99	48	630	38	72	8	63	487	6	10	52	115	121	144	46	46	2225	2225		
12 Mos.	983	641	7673	367	580	89	1046	6276	83	68	703	1546	1862	1630	1807	553	2327	28044		
New York.....	2011	1413	9553	889	1108	101	1893	7417	141	209	209	893	2962	2845	2168	2550	475	2728	39807	
12 Mos.	23845	18442	13789	11595	14615	2463	3265	11532	2026	2044	12925	37490	50372	36480	44377	11245	54219	611830		
North Carolina.....	438	155	2449	93	295	18	350	2676	10	22	199	455	488	593	347	147	646	9381		
12 Mos.	5050	1960	2316	1214	2668	335	4679	3250	171	216	2778	5439	7410	7002	5023	1760	9701	118674		
North Dakota.....	82	17	513	34	34	3	93	420	5	69	132	111	74	102	37	37	1748	1748		
12 Mos.	807	304	5622	389	488	94	1288	5138	63	44	774	1326	1555	1015	1261	294	672	21144		
Ohio.....	1609	710	6802	402	757	63	1105	592	72	151	776	1834	1368	2343	1351	355	1252	26942		
12 Mos.	19156	7897	105166	4351	13068	1553	2894	9128	888	1052	11589	23517	28438	28478	22694	5894	21724	413777		
Oklahoma.....	427	182	2507	90	184	14	301	2274	7	16	72	17								

The Schrader Valve at right has outlasted an excellent tire. *It should not be expected to outlast another.* Its rubber has set, reducing its diameter and sealing effectiveness. Always install a new valve with every new tubeless tire you mount to insure your tires' reputation... and your customers' safety.



WHENEVER YOU MOUNT A NEW TUBELESS TIRE... MAKE CERTAIN THE VALVE IS AS NEW AS THE TIRE



Each size available in boxes of 10 or 50 for individual car-tire-valve replacement service.

These seven Schrader Tubeless Valves provide the best replacement for any size original equipment valve. A complete chart showing best practice for every car since 1955 is available from your supplier in large size for wall posting. Ask for it when you order Schrader products from your supplier.

INVENTORY A PROBLEM? Stock #413R and #54 only. With $\frac{3}{8}$ " extension #3680C and $1\frac{1}{4}$ " extension #3680G, you're set to service all passenger cars! Kit #990 contains 20 valves, 7 extensions.



Schrader
a division of **SCOVILL**

A. SCHRADER'S SON • BROOKLYN 38, N. Y.
Division of Scovill Manufacturing Co., Inc.

FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

Made in America to American Standards of Quality



YOU'RE LOOKING AT



COMPLETE IGNITION CABLE COVERAGE FOR 197 CARS

There's a lot you'll like about this new Autolite system for packaging new "balanced resistance" ignition cable. The most obvious difference is twelve part numbers, just twelve boxes on your shelf give you complete coverage of all popular models.

This means you save valuable shelf space. And using the easy selection chart you can assemble the right set for any car in less than a minute.

Inventory and ordering are simple, fast. The same investment gives you twice the coverage, many times the flexibility of the old type box-a-car systems. Handy Select-O-Lenth boxes have knock out centers, permit finger tip part selection. Why

fight a losing battle by doing things the hard way? Take the easy way out. Autolite Supermarket Packaged ignition cable. Available now.

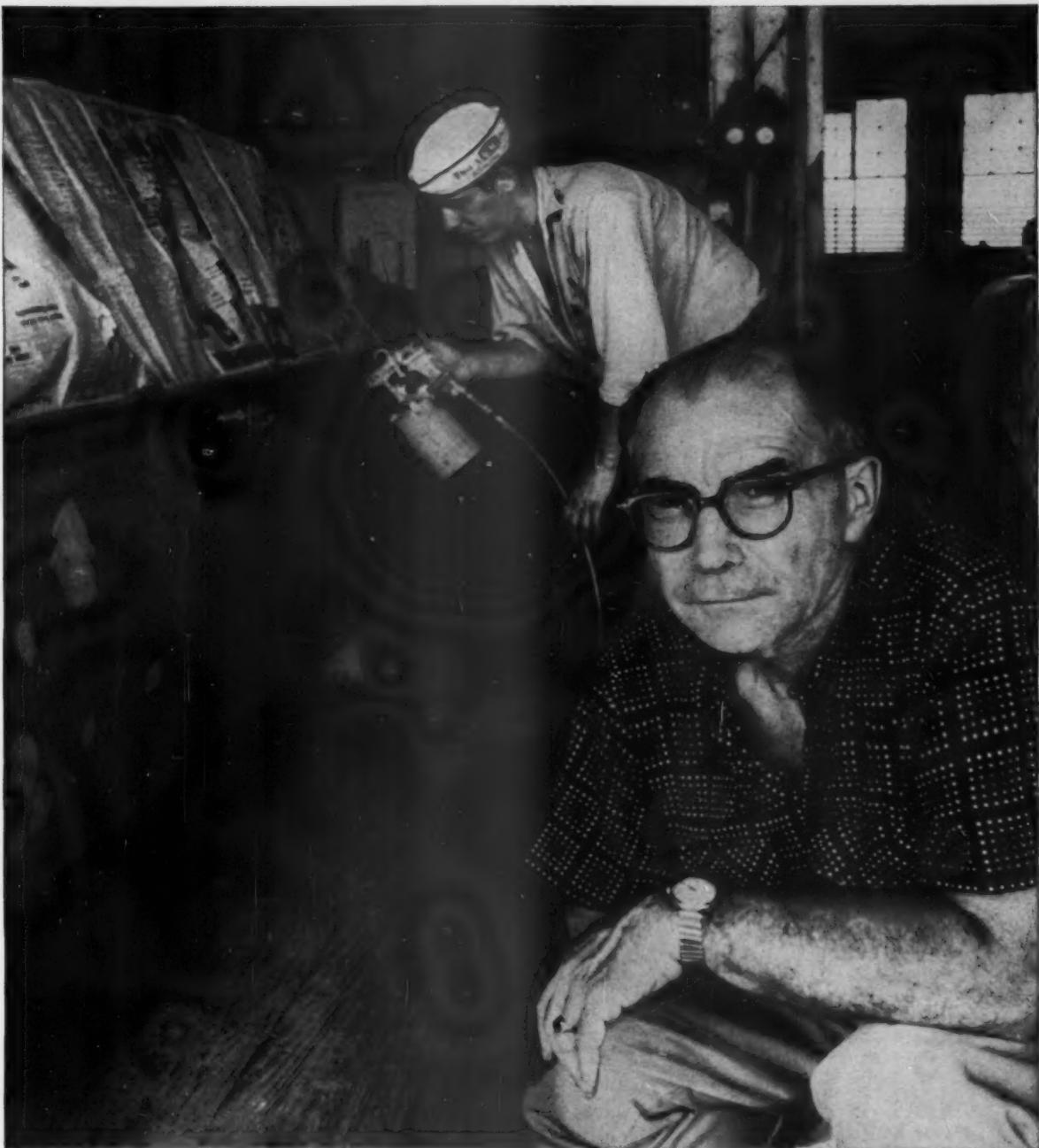


AUTOLITE
WIRE & CABLE DIVISION • TOLEDO 1, OHIO

CURRENT PASSENGER CAR PRICE, WEIGHT AND BODY TABLE

Following are prices at factory for cars with standard equipment as of February 17, 1961
State or local taxes, transportation and finance charges and optional equipment are extra.

BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	
AMERICAN MOTOR CORP.																		
RAMBLER					CHRYSLER CORP., cont'd				FORD MOTOR CO., cont'd					GENERAL MOTORS, cont'd				
American-5					Hardtop, 2d... 2503	234	2737	3520	THUNDERBIRD	3426	329	3755	3799	CHEVROLET, cont'd				
DeLuxe					Hardtop, 4d... 2558	236	2796	3555	Hardtop... 3480	3880	362	4222	3887	Sta. Wag., 8p...	2635	264	3099	3930
Sedan, 2d... 1584	161	1845	2504		Convertible... 2735	292	2988	3580	Lincoln	5665	502	6067	4927	CORVAIR				
Sedan, 4d... 1730	164	1894	2541		DODGE	Polara-V8			Continental	6168	547	6713	5215	500				
Sta. Wagon, 2d... 1902	176	2080	2582		Sedan, 4d... 2706	260	2966	3700	Sedan, 4d...	5865	502	6067	4927	Coupe	1780	170	1920	2320
Sta. Wagon, 4d... 1948	181	2128	2585		Hardtop, 2d... 2767	265	3032	3690	Convertible...	6168	547	6713	5215	Sedan, 4d...	1800	174	1974	2355
Super-5					Hardtop, 4d... 2840	270	3110	3740	Hardtop, 2d...	2267	229	2885	3887	Sta. Wag...	2075	...	2530	
Sedan, 2d... 1763	167	1930	2506		Convertible... 2872	280	3282	3785	Hardtop, 4d...	2417	220	2849	3887	700				
Sedan, 4d... 1809	170	1979	2544		Sta. Wagon, 6p... 3011	283	3294	4115	Hardtop, 2d...	2422	223	2849	3887	Coupe	1810	175	1985	2380
Sta. Wagon, 2d... 1961	184	2165	2554		Sta. Wagon, 8p... 3118	291	3409	4125	Hardtop, 4d...	2437	224	2849	3887	Sedan, 4d...	1850	179	2039	2380
Sta. Wagon, 4d... 2027	187	2214	2620		Convertible... 3121	501	5774	4985	Hardtop, 2d...	2443	230	2721	3882	Sta. Wag...	2135	196	2331	2555
Custom-6					Southamp... 4d... 4828	475	5403	4790	Hardtop, 4d...	2452	231	2782	3882	CORVETTE				
Sedan, 2d... 1884	176	2080	2557		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2463	244	2806	3886	Sportscar	3019	315	3834	2985
Sedan, 4d... 1929	180	2169	2594		Southamp... 4d... 5186	492	5647	4855	Hardtop, 4d...	2471	251	2806	3886	OLDSMOBILE				
Sta. Wagon, 2d... 2102	183	2266	2612		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2479	259	2806	3886	F-85				
Sta. Wagon, 4d... 2148	196	2344	2671		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2487	266	2806	3886	Sedan, 4d...	2175	206	2384	2541
Convertible... 2170	199	2399	...		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2495	273	2806	3886	Del. Sed. 4d...	2300	219	2519	2547
Classic-6					Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2503	281	2806	3886	800				
DeLuxe					Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2511	288	2806	3886	800				
Sedan, 4d... 1918	180	2088	2915		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2520	296	2806	3886	800				
Sta. Wagon, 4d, 2s... 2233	204	2437	3047		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2528	304	2806	3886	800				
Super					Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2536	312	2806	3886	800				
Sedan, 4d... 2071	187	2268	2933		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2544	320	2806	3886	800				
Sta. Wagon, 4d, 2s... 2354	218	2572	3068		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2552	328	2806	3886	800				
Sta. Wagon, 4d, 3s... 2473	224	2687	3121		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2560	336	2806	3886	800				
Custom					Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2568	344	2806	3886	800				
Super					Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2576	352	2806	3886	800				
Sedan, 4d... 2191	206	2397	3255		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2584	360	2806	3886	800				
Sta. Wagon, 4d, 2s... 2474	227	2701	3376		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2592	368	2806	3886	800				
Sta. Wagon, 4d, 3s... 2593	233	2828	3430		Southamp... 4d... 5186	492	5647	4855	Hardtop, 2d...	2600	376	2806	3886	800				
Ambas-V8					PLYMOUTH†	Savoy-V8			Hardtop, 2d...	2608	384	2806	3886	800				
Super					Savoy-V8	262	2737	3440	Hardtop, 2d...	2616	392	2806	3886	800				
Sedan, 4d, 2s... 2286	235	2557	3437		Belvedere-V8	264	2737	3440	Hardtop, 2d...	2624	399	2806	3886	800				
Sta. Wagon, 4d, 3s... 2700	241	2941	3437		Belvedere-V8	266	2737	3440	Hardtop, 2d...	2632	407	2806	3886	800				
Custom					Electra-V6	268	2737	3440	Hardtop, 2d...	2640	415	2806	3886	800				
Super					Electra-V6	270	2737	3440	Hardtop, 2d...	2648	423	2806	3886	800				
Sedan, 4d... 2233	214	2537	3361		Electra-V6	272	2737	3440	Hardtop, 2d...	2656	431	2806	3886	800				
Sta. Wagon, 4d, 2s... 2606	235	2543	3439		Electra-V6	274	2737	3440	Hardtop, 2d...	2664	439	2806	3886	800				
Sta. Wagon, 4d, 3s... 2725	241	2966	3433		Electra-V6	276	2737	3440	Hardtop, 2d...	2672	447	2806	3886	800				
Custom					Electra-V6	278	2737	3440	Hardtop, 2d...	2680	455	2806	3886	800				
Sedan, 4d... 2458	224	2582	3360		Electra-V6	280	2737	3440	Hardtop, 2d...	2688	463	2806	3886	800				
Sta. Wagon, 4d, 2s... 2741	245	2988	3495		Electra-V6	282	2737	3440	Hardtop, 2d...	2696	471	2806	3886	800				
Sta. Wagon, 4d, 3s... 2860	251	3111	3361		Electra-V6	284	2737	3440	Hardtop, 2d...	2704	479	2806	3886	800				
CHRYSLER CORP.					VALIANT	V-100			Hardtop, 2d...	2722	487	2806	3886	800				
CHRYSLER					Sedan, 2d... 1782	171	1953	...	Hardtop, 2d...	2740	495	2806	3886	800				
Newport					Sedan, 4d... 1838	176	2014	...	Hardtop, 2d...	2758	503	2806	3886	800				
Sedan, 4d... 2683	271	2964	3710		Sedan, 4d... 2126	199	2327	...	Hardtop, 2d...	2776	511	2806	3886	800				
Hardtop, 2d... 2750	275	3025	3800		Sedan, 4d... 2127	201	2423	...	Hardtop, 2d...	2794	519	2806	3886	800				
Hardtop, 4d... 2824	280	3104	3730		Sedan, 4d... 2130	201	2423	...	Hardtop, 2d...	2812	527	2806	3886	800				
Convertible... 3137	305	3442	3760		Sedan, 4d... 2131	201	2423	...	Hardtop, 2d...	2830	535	2806	3886	800				
Sedan, 4d, 2s... 3230	311	3541	4070		Sedan, 4d... 2132	201	2423	...	Hardtop, 2d...	2848	543	2806	3886	800				
Sta. Wagon, 3s... 3305	311	3622	4155		Sedan, 4d... 2133	201	2423	...	Hardtop, 2d...	2866	551	2806	3886	800				
Windjammer					Sedan, 2d... 1830	183	1998	2399	Hardtop, 2d...	2884	559	2806	3886	800				
Sedan, 4d... 2820	298	3218	3730		Sedan, 4d... 2080	173	2083	2399	Hardtop, 2d...	2902	567	2806	3886	800				
Hardtop, 2d... 2994	304	3203	3710		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	2920	575	2806	3886	800				
Hardtop, 4d... 3059	308	3367	3765		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	2938	583	2806	3886	800				
New Yorker					Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	2956	591	2806	3886	800				
Sedan, 4d... 3752	371	4123	4055		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	2974	599	2806	3886	800				
Hardtop, 2d... 3800	375	4175	4065		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	2992	607	2806	3886	800				
Hardtop, 4d... 3880	381	4261	4100		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3010	615	2806	3886	800				
Convertible... 4168	404	4592	4070		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3028	623	2806	3886	800				
Sta. Wagon, 2d... 4348	416	4746	4225		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3046	631	2806	3886	800				
Sta. Wagon, 3s... 4448	421	4871	4455		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3064	639	2806	3886	800				
300-Li					Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3082	647	2806	3886	800				
Hardtop, 2d... 4582	469	4911	4315		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3100	655	2806	3886	800				
Convertible... 5352	489	5041	4315		Sedan, 4d... 2119	191	2310	2348	Hardtop, 2d...	3118	663	2806	3886	800				
DE SOTO					FALCON	Fairlane-VII			Hardtop, 2d...	3136	671	2806	3886	800				
Hardtop, 2d... 2827	275	3102	...		Fairlane-VII	Tutor Sedan...	2163	214	2377	3585	679	2806	3886	800				
Hardtop, 4d... 2888	279	3167	...		Fairlane-VII	Tutor Sedan...	2163	214	2377	3585	687	2806	3886	800				
DODGE DART†					Fairlane-VII	Club Sedan...	2167	214	2377	3585	695	2806	3886	800				
Sedan, 2d... 2187	210	2387	3470		Fairlane-VII	Club Sedan...	2167	214	2377	3585	703							



"Our Yellow Pages advertising under 13 headings and 4 trade-marks really brings us new business!" says R. Werner, partner, Walker & Werner, Peoria, Ill. "Our 6 large display ads in the Yellow Pages make it easy for people to spot our name and call us. Our trade-mark listing under Thermo King Air Conditioners brings in customers as far as 150 miles away! And our ads under TRUCK REPAIRING & SERVICE and AUTOMOTIVE TOWING bring in 75% of the business we get from trucks passing through our area!"



Display this emblem. It builds your business!

Display ad (shown reduced) runs under WHEEL, FRAME & AXLE SERVICING—AUTOMOTIVE. Call the Yellow Pages man at your Bell Telephone Business Office to plan your program.

FRONT END SERVICE

- BALANCING
- STRAIGHTENING
- ALIGNING

WHEEL and AXLE SERVICE
24 HR. RADIO DISPATCHED TOWING

674-8195

SINCE 1900

WALKER AND WERNER

Body Shop
207 Fayette

Garage and Parts Dept.
220 N. Washington

CAR and TRUCK shop KINKS

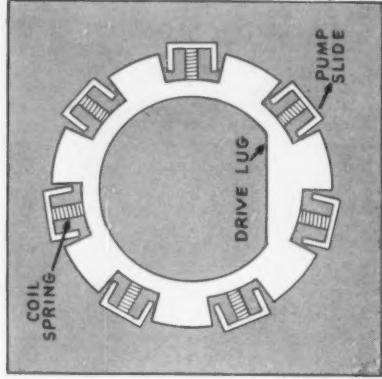
\$25 for KINK of the month \$10 paid for other KINKS

Installing Rear Pump On Two Speed Fordomatic Transmissions

Bob Edens, Rt. 6, Rogersville, Tenn.

Kink of the Month

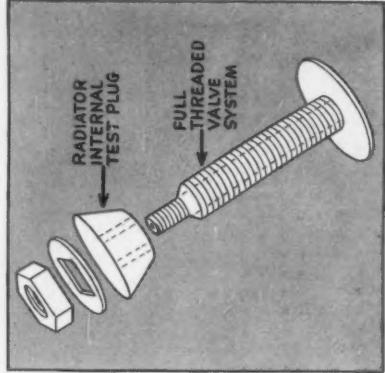
93. To assemble rear shaft thru the rear pump on Fordomatic two-speed transmission place the drive ring on any surface. Then position springs and gear slides around ring. Use a ring compressor to compress slides flush with drive ring. Then insert shaft and tap with hammer. Next install pump cover and the job is done.



Torque Converter Tester

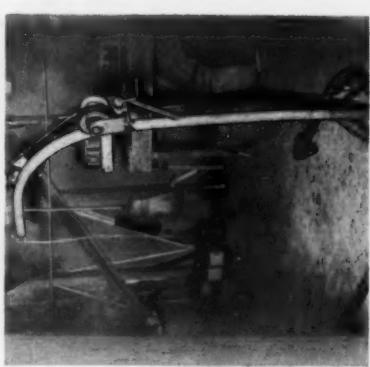
John Jones, c/o Jones & Sons, Holbrook, Arizona

94. Air pressure can be applied to torque converters to find leaks by assembling a valve stem to a radiator test plug. Place unit in open end of converter. Tighten nut to expand test plug and seal opening. Apply air pressure and look for leaks.



How to Build an Inexpensive Mobile Crane

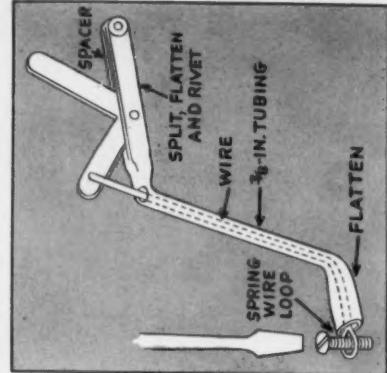
Harry J. Miller, 991 Forty-second St., Sarasota, Fla.



95. Here is the way to build an inexpensive mobile crane. It is made of 2-in. pipe and the winch is from a surplus piece of army equipment. The crane costs very little to make. It speeds service and saves labor in handling heavy awkward automotive units.

Tool For Starting Screws In Hard-To-Reach Places

H. Josephs, P.O. Box 22, Gardenville, Pa.



96. One of the most useful tools we have for starting screws in hard-to-reach places is made from tubing and spring wire. The squeeze handle closes the loop around the screw and after starting the screw, releasing the handle opens the loop and lets the screwhead pass through.

MONMOUTH
QUALITY
IN ACTION



"I've used Monmouth Bearings for 15 years...

... and you can benefit from my experience. I've seen a lot of changes in cars since I repaired my first Model T. Today's engines need high quality bearings, designed especially for modern driving. Believe me, you won't find a better line of bearings than Monmouth."

If you want performance that pays off, use Monmouth bearings in all your engine rebuilds. For instant service, call on your NAPA jobber. He can give you complete Monmouth service on all your engine bearing requirements.

reports J. P. Lamb
Lamb's Garage
Meridian, Mississippi

MONMOUTH Engine Bearings

CLEVITE SERVICE: Cleveland Graphite Bronze • Division of Clevite Corporation • Cleveland 3, Ohio

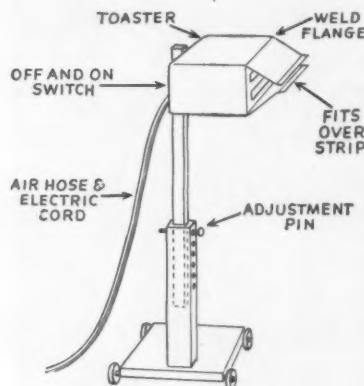


BODY SHOP TIPS

Toaster Mounted on Stand Dries Water Under Moldings

To solve the problem of water from running out from under the chrome strip and ruining a paint job, I welded a reducing flange around the opening of a toaster. Then I coupled an air hose to the bottom of the toaster to force the heat at a low pressure out through the reduced opening. I welded the toaster to

using a $\frac{1}{16}$ " drill. Then I separate the new parts in the same way and discard the new air duct. I attach the new hinge to the original air duct with bolts exactly like the ones that attach the hood to the hinge, reaching into the front of the air duct to place nuts on the bolts. *J. P. Matlock, c/o Pharis Auto Sales, 4700 Towson Ave., Ft. Smith, Ark.*



an adjusting stand with rollers. This will enable you to move this unit alongside of the car at any height, drying as it goes. Since this unit puts out 350° you will be amazed at the speed it does its job. *Doyle Zumwalt, 1698 S. Prospect, Porterville, Calif.*

Replacing Hood Hinges On '52, '53 and '54 Fords

Many '52, '53 and '54 Fords need to have one or both hood hinges replaced. Most mechanics do not try to get the job of replacing them as they are assembled together with the air ducts on which they are mounted and the whole unit is very hard to replace. Here is the way I make the replacement in about 20 minutes. Instead of replacing the whole assembly, I drill the two rivets out of the air duct on which the hood hinge arms pivot,

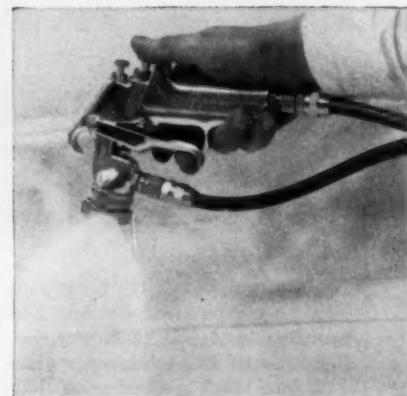
Quick Method For Patching Rusted Areas

When patching a rusted out hole, first grind off paint then bevel the edges in, around and under the hole with a hammer. Then lay a piece of screen over the hole and with a pencil draw on the screen the shape of the hole. Then cut the screen a little bigger than the hole. Now apply your plastic filler. *Justin D. Tieri, 628 Porkside, N.W., Grand Rapids, 4, Mich.*

Spare the painter, speed the job!



NO CUP TO OBSTRUCT. Tricky car contours are painted with ease.



NO CUP TO DRIP. No vent hole. Gun operates by pressure feed.

Way To Remove Stickers From Painted Surfaces

Here's a way to remove stickers and most dealer stickers from painted and chrome surfaces. Use a small propane torch. Heat the stickers and remove with a piece of hard rubber. *Robert Wernersbach, Glenmere Rd., R.D. #1, Goshen, N.Y.*

Mounting A Mirror On Pontiac Left Front Fender

On '60 and '61 Pontiacs, may-

be some other makes too, they have on the left front fender a mirror that is controlled from the inside of the car. When you repair a wrecked job and install a new fender for that side, you have three holes to drill for the mounting of the mirror. Two the same size and one large one. When you don't have a templet to mark the holes on the fender, I use two strips of two inch masking tape letting one overlap the other. Put this on the damaged fender, parallel with the fender too and over the drilled

holes. Punch the tape through the holes of the fender, peel it off. Put it on the new fender, mark it, then drill it, and the mirror is ready to install. *Willis L. Butler, Niggles Pontiac Co., 401 W. Vince St., Mt. Vernon, Ohio.*

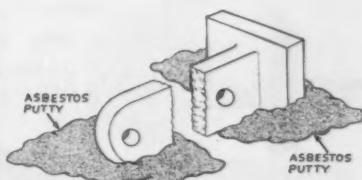
Easy Way To Remove Spotwelded Panels

To remove spotwelded panels: first clean paint off spotwelds with an electric wire brush or torch and hard brush, prick punch each weld, then using a sharp drill about the size of the spot, drill through the first layer of metal. Before drilling, dip the drill bit in Permatex and repeat this every 6th weld. This keeps the drill sharp and drills these hard spots easily. This same method of drill coating will also make hard metal parts such as bumpers, drill easily. *Arnold R. Davis, Hoagland Auto Body, Concord, N.H.*

Improved

DeVilbiss Remote-cup

Outfit Here's the answer to painting the hard-to-get-at surfaces and tricky contours of late-model cars. It's the *improved* DeVilbiss Remote-Cup Outfit—the easiest-to-handle spray outfit you've ever laid hands to! Now you can spray with the gun at any angle—straight up, sideways, even upside down—without danger of sputtering, or vent-hole drip. That's because the two-quart paint cup is *remote* from the gun. Hold it in your free hand. Place it on the floor. You never need to worry about a cup blocking your spray angle or marring a fresh finish. What's more, the Remote-Cup Outfit sprays all the new materials—acrylics, lacquers, enamels, primers—with the kind of full, wet, uniform coats that pay off at the cash register. See it! Try it! Buy it!—to spare the painter, speed the job! Your DeVilbiss supplier is the one to see for your Remote-Cup Outfit . . . plus details on DeVilbiss' complete line of spray guns, air compressors, spray booths, baking panels, hose and connections. The DeVilbiss Company, Toledo 1, Ohio. Branch offices in principal cities.



of this is placed on the welding table; the two broken parts are stuck into the putty and aligned. They can be tacked, then removed for the finished weld. *William E. Bessler, 170 W. Tallmadge Ave., Akron 10, Ohio.*

BEST TOOL.

***Buy 4 MERIT Mufflers . . .
get the air-powered Muffler
Kutter, complete, FREE!***

Here's all you do . . .

Buy the Merit Kutter Pack Special, T-218, containing four of the fastest-selling Merit mufflers. Pay regular dealer list price for the mufflers (\$53.95). Add just a dollar, the bargain price of the heavy duty metal tool box, and the entire Kutter set—Kutter and three blades—is yours free! *In addition*, you receive FREE the valuable 24-page Merit Installation Guide, plus a "15-Minute Installation" banner. Do four muffler jobs and you wash out the *entire* cost of mufflers and tool, with dollars to spare!



**Complete cost of Kutter
Pack Special, T-218**

\$54.95



DEAL YET!



With the powerful
Muffler Kutter you
become a high-speed
installation center
... It makes you a
muffler specialist
right away!



Contact your Merit jobber for this big-value deal.
Do it now—this offer is good for a limited time only.

MERIT
MUFFLERS AND PIPES

Dept. 15-C, 619 Smith St., Toledo 1, Ohio

Merchandising Ideas *Continued from page 49*

setting forth opportunities for summertime placement. Any office, store, industrial concern or family who can use a highschooler advantageously, full or part-time may whack out a brief ad setting forth all the necessary details. These are run "for free" and are interspersed with equally brief comments on cars currently in the Hartzell showroom

of used and economical species.

The other dealership that makes hay in the summertime is Edina Motors, also of Edina, Minnesota. This dealership visualizes the summertime along somewhat adult lines. It sponsors a "Dream Vacation" contest the first two weeks in July. Anyone, worker, executive, housewife or teenager may write a letter

briefly outlining the place where they would like to spend their vacation. It can be at a cottage by the seashore, a trip to California or wherever their fancy takes them. Letters must be brought personally to the dealer's showrooms and dropped in the Contest Box.

Every entrant receives a credit slip worth \$20 towards a used or new car. \$100 in cash prizes are presented for the really top drawer flights of vacation fancy.

Prize winning and runner-up letters are excerpted. Some are used as ammunition for newspaper ads listing "Travel Buys" in the way of used cars which have been put in fine tip top shape for summer vacations. Other letters find their way onto the showroom bulletin board. All are catalogued for future direct mailing campaigns scheduled to take place during July and August.

Edina Motors also will be utilizing its annual "Dog Daze" series of used car cavalcades during the last two weeks of August. During this period, every day will find three used cars offered for one day only at special prices, unadvertised and unheralded. They are quite definitely not "dogs" in any sense of the word. All carry some guarantee. All are excellent buys.

All these promotion plans take time and thought to set up. That is why it is not early to map out your summertime sales strategy. These two dealerships have found ways to make summertime an exciting and profitable season in new and used car sales. Your own dealership can also come up with equally successful sales promotions for summer, but you must start planning your campaign NOW!

NOW! Snap-in Valves at your fingertips...

This new dispenser pak costs no more than when you buy valves at 10 to a box.

And yet it puts valves where you want 'em — when you want them. Just reach a few inches from your tire changer and you have the two standard sizes of snap-in valves at your fingertips. An easy pull and you make up to 65¢ net profit.

The total package includes 50 valves. 30 T-151-R for 15" wheels and 20 T-13-R for 14" wheels. Valves are packed in translucent tubes (10 to a tube) which make a simple, visible inventory control.

Same price as when you buy 10 to a box...

**50 valves cost \$20.50
and you will gross from \$37.50 up**

Order No. 5254 from your supplier

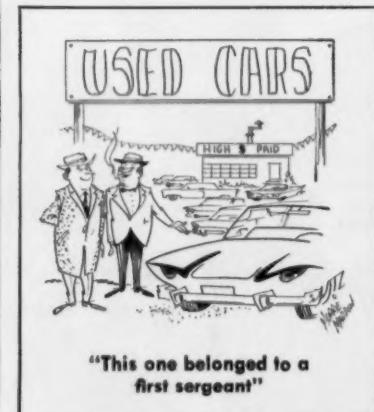
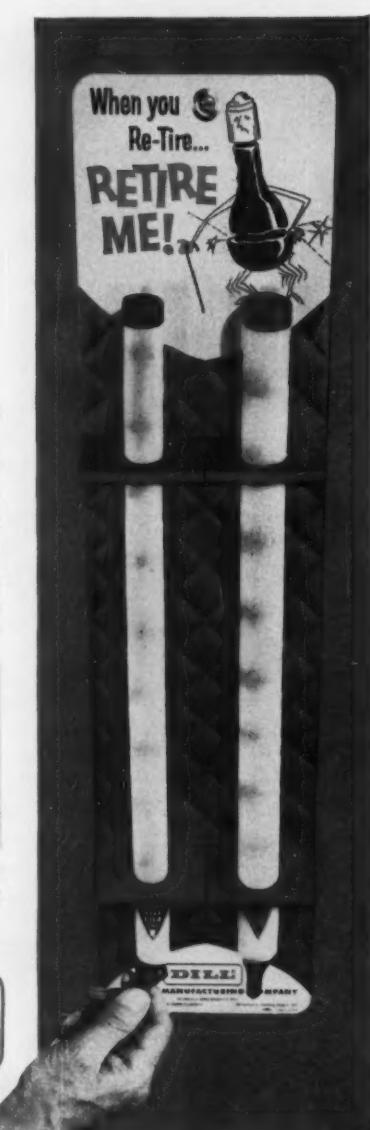


**FREE 5 Color Mobile
Included in Pack!**

DILL®

Manufacturing Company

700 E. 82nd Street Cleveland 3, Ohio





Will he stop in time?

Did you know that, although it takes ONE MINUTE for a 100 horsepower engine to accelerate from 0 to 60 mph, brakes must be capable of decelerating from 60 to 0 mph in SIX SECONDS—equivalent to 1000 horsepower.

American Brakebloc—producer of America's safest, quality brake lining—has been working closely with highly skilled engineers of the automobile industry who are constantly seeking a brake lining that will stop a car faster and with greater safety, for thousands of miles longer.

Its research center, staffed with heat, wear

and friction specialists and equipped with the most modern development facilities, is constantly developing a wide range of materials that give automotive designers greater freedom in drawing specifications.

These materials, thoroughly tested and proven, are available to meet the most rigid braking requirements of modern automobiles and trucks. Do your customers a real service—by making their driving far safer—install American Brakebloc, America's SAFETY brake lining. Riveted and bonded exchange—from your NAPA Jobber. Call him now!



AMERICAN BRAKEBLOK

P. O. BOX 21 • BIRMINGHAM, MICHIGAN

Readers' Clearing House

By Jack Montgomery, Technical Editor

Problem With Hard Starting Oldsmobile

For sometime now I wanted to write to you about hard starting Olds. I know there are lots of things that could cause a car to be very hard starting, but suppose you have good compression and ignition and plenty of fuel in proper proportions, what else could make these cars to be hard to start after setting for a short time? I've had several of these cars, and some start very easy, no matter how long they set. Then others just seem to not want to start until after cranking for quite a few minutes. I would like to hear from you on this subject as soon as possible. All help would be very greatly appreciated, believe me.

Samuel H. Schaffer
(Sam's Garage)
Spokane 17, Washington

USUALLY when you run into this problem it is due to the carburetor bleeding gas into the manifold. I would suggest you check the float level and the needle valve and seat. Make sure the heat damper valve is operating properly.

300 D Mercedes Has Piston Failure

We recently tuned up a 1959 Mercedes 300 D, with fuel injection, into which we installed a new set of spark plugs. After 700 miles of excellent performance the engine broke down on the New York Thruway while going 60 MPH. There was no preliminary indication of trouble. However, there was what sounded like three explosions and lots of smoke and then the engine simultaneously lost power.

Inspection showed that the top of one piston had a hole ap-

proximately 1" in diameter. The other five pistons were not damaged and appeared quite normal. The car dealer claims the spark plugs we installed were too hot causing the trouble. We feel there was some other cause, possibly faulty fuel injection. Can you tell me what really could have caused this piston failure?

Frederick J. Haug
George Haug Co., Inc.
New York 21, N.Y.

IF this engine operated satisfactorily for 700 miles before running into trouble I doubt very much if the spark plugs were at fault. I have seen cases where this happened on some American cars. It was caused by detonation, the result of the ignition being timed too early. Also a lean mixture could increase the combustion temperature and cause piston failure.

Service Tip For Chrysler Brakes

BURRS or sharp edges on the brake shoe table loops and, or on the brake dust shield platforms can prevent the brake shoes from returning to the shoe rest position against the adjusting cams. If this condition occurs, a variation of brake pedal height, and in severe cases brake drag may be experienced. In the event any of the above conditions are encountered which can not be corrected through normal adjustment and bleeding it is recommended that the brake drums be removed and inspected. Remove the drums and brake shoe assemblies. Remove any burrs or paint build-up on the dust shield platforms. Lubricate all platforms with a thin film of lubricant. Carefully remove all sharp edges on the shoe loop

Continued on page 90

Better products, faster, from your National Seal jobber:



This is no surprise package

When you open a box of National Oil Seals, you know exactly what to expect . . . a quality product. And that's not all! Your customers get safety. When you replace old, pulled seals with new National Oil Seals, you protect wheel bearings and brake

linings from dangerous lubricant leakage. What do you get? Extra profits. Installing new seals boosts your gross on repacks, more on relines. And your National Seal jobber gives fast delivery on a complete line. Call him today!



NATIONAL OIL SEALS

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



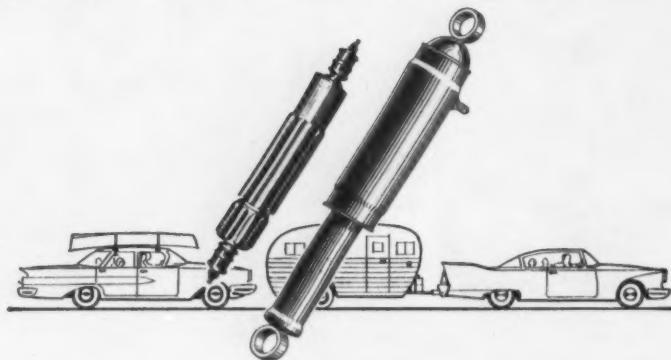
with a file or scraper. Only remove sufficient material to smooth the loop edges. Removing larger amounts can lead to poor loop to platform contact and may introduce noise. Reinstall the brake shoes, retainers and return springs. Check the brake shoe return spring tension by attaching a spring scale at the top of the shoe and pull shoe

away from wheel cylinder. When the scale registers 45 to 55 pounds pull, the brake shoe should begin to move away from the wheel cylinder push rod. If more than 55 pounds pull is required to move the shoe, check for conditions which could cause drag. If less than 45 lbs. is required install a new brake shoe return spring.

Give customers the best ride for their money with

GOLDEN GLIDE

Shock-Absorbers • Load-Absorbers



Whether it's Golden Glide Shock Absorbers all around or Golden Glide shocks in front and Load-Absorbers in back, your customers will get a truly *balanced ride*. Golden Glide shocks provide the velvety-smooth ride customers expect from new-car suspensions. Load-Absorbers in place of rear shocks mean the car *always* rides level—loaded heavy or light. For extra-heavy loads—house or boat trailer, etc.—the motorist just adds air pressure to the Load-Absorbers.

Sell this top-performance team for more satisfied customers and more profits. Golden Glide means smooth going—for you and for your customers. Call your jobber today for full details.

THE GOLDEN GLIDE SHOCK ABSORBER COMPANY

Cleveland 15, Ohio

GOLDEN GLIDE
Shock-Absorbers • Load-Absorbers

1954 Plymouth Is Hard to Start After Stopping

We have been unable to correct a hard starting condition in a 1954 Plymouth equipped with Powerflite transmission. The engine starts promptly when the car is cold, generally on the first turn; the trouble develops after the car has been run up to a normal operating temperature and stopped for about 10 minutes. After the engine has stood about 10 minutes it takes an awful lot of grinding to get it started. Once it is started you can stop it and get it started again promptly if not allowed to stand more than a minute or two. We have checked the distributor, installed new points and condenser and new coil. We have tried another carburetor and none of these things seem to help. The car runs perfectly and never gives any starting trouble unless it has been run a few miles to be thoroughly warmed up. Stop it for 10 minutes and you can hardly get it started; if it stands for 30 minutes it will start okay. Any suggestions you may give us to help will be appreciated.

Robert Preusse, Shop Foreman
H. J. Prichard & Son
Falls City, Neb.

I assume you mean that the starter spins the engine, but it just won't start. If the starter is OK, then I would suggest checking for vapor lock. This could be caused by a stuck exhaust manifold heat valve, causing the carburetor to boil the gas and bleed into the manifold while parked. I would suggest after parking the car, raise the hood and remove the air cleaner. Looking into the carburetor should show if carburetor is bleeding gas into the manifold.

Ford Has Annoying Thud Noise

A persistent "bumping" (the effect of hitting bottom) has
Continued on page 98

New Products Continued from page 59

Brake Bleeder

Reduces chances for fluid contamination



Lisle Corporation: A new hydraulic brake bleeder, Model BB10, is introduced. Bleeder features elimination of high pressure air and fluid mixture. It reduces the chances for fluid contamination. The air-fluid mixture problem is eliminated because the BB10 is spring, rather than air operated, company states. To "cock" the bleeder, the operator pulls up on the pressure cylinder handle. This draws fluid into cylinder and compresses a spring. This provides the pressure on the fluid necessary to make bleeding a brake system a one man job, it is said. Write: O. S. Gregory, Sales Mgr., Lisle Corp., 807 E. Main St., Clarinda, Iowa, or 'phone LI 2-2156.

Tire Gauge

Shows tire's exact pressure



Lenmark Products, Inc.: A tire gauge showing tire's exact

pressure, while at the same time protecting wheel covers from theft, is just being marketed. Called the Vu-Gage, it is available in sets of four vu-gages with two special keys. The Vu-Gage increases tire life by warning of under-inflation. Once on the wheel, it can only be removed with the special key, preventing

wheel cover vandalism. Write: Lenmark Products, Inc., 570 Fifth Ave., New York 36, N.Y., or 'phone Circle 5-3111-2-3.

Tire Valve Dispenser

Holds valves for 15 and 14 inch wheels

Dill Manufacturing Co.: Developed is a Tubeless Tire Valve Dispenser-Pak. The display dis-
Continued on page 93

"Our INLAND Radiator Department brings us an average of \$300.00 A WEEK! (Over \$15,000 a year!) Wish we had installed the equipment years ago!" — Douthit-Carroll-San Chez Co., Memphis, Tenn.

\$10,000 to \$20,000 A YEAR ADDITIONAL VOLUME IS COMMON! "\$16,750 in one year!" — McRill's Auto Repair & Radiator Service, Twin Falls, Idaho. "\$18,000 in one year!" — Clough Auto Parts, Storm Lake, Iowa. Radiator servicing brings more profit per sq. ft. than any other activity in the service area!

20 to 30 MILLION RADIATORS NEED SERVICING YEARLY! Tests prove 83% of all radiators over a year old are partly plugged. Inland equipment shows customer his radiator needs cleaning — is designed for fast easy production methods — stays neat and clean.

Inland, world's largest radiator equipment manufacturer, offers the complete package — Equipment, Training, Merchandising, "Pays-For-Itself" Purchase Plan.

FREE BOOK!

New free 48-page book "Blueprint for Profits" shows equipment, training course, "Pays-for-itself" purchase plan and experiences of other operators. Take a minute and mail the coupon now.

INLAND MFG. CO.
1108 Jackson St.
Dept. MA-8, Omaha 2, Nebr.

MAIL COUPON TODAY

INLAND MFG. CO., Dept. MA-3
1108 Jackson St., Omaha 2, Nebr.

Please send new free book, "Blueprint for Profits."

FIRM _____ (PLEASE PRINT)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

BY _____ TITLE _____

If dealer, make of car sold.
Are you now operating a radiator Dept. Yes No



PUTS YOU A STEP AHEAD...

... a giant step on the path of profits with WIX-O-MATIC, the selling system for Air Filters and Oil Filters that deducts the risk, the doubt, wasted time and unnecessary inventory.

WIX-O-MATIC enables you to serve customers quicker and better and makes the job easier for your service mechanics. It's the big important profit story your jobber wants to tell you. Call him today!

WIX CORPORATION • GASTONIA, N.C.

In Canada: Wix Corporation Ltd., Toronto

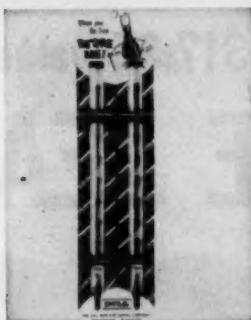
In New Zealand: Wix Corporation New Zealand Ltd., Auckland

MOTOR AGE • March 1961

- Guaranteed sales.
- Guaranteed against obsolescence.
- Automatic stock control.
- Instant identification of the right filter.
- Balanced stock for your needs.
- Minimum investment — fast turnover.

New Products Continued from page 91

penser holds 30 valves for 15 in. wheels, 20 valves for 14 in. wheels. It also serves as an attractive colorful merchandiser



which reminds motorists of the need to replace valves at the same time tubeless tires themselves are replaced or repaired. The unit is normally hung near the tire repair area. It is so designed that only one valve can be removed at a time. Translucent tubes provide visible inventory control. Write: L. S. Petrovich, Adv. Mgr., The Dill Manufacturing Co., 700 East 82nd St. Cleveland 3, Ohio, or 'phone Utah 1-3200.

Stock Control System

For dry type air filters



Wix Corporation: New Wix-O-Matic cabinets have been introduced. Wix-O-Matic floor and wall cabinets condense air filter stocks into a minimum of space provide many additional advantages, according to the manufacturer. Both the wall rack and floor cabinet provide for both

large and small size filters with adjustable shelf dividers. These dividers also identify the filter to occupy each individual space, automatically signaling when a size should be reordered. This provides a continuous stock control feature. Write: Norman A. Hull-Ryde, Sales Promotion Mgr., Wix Corp., 1301 Ozark Ave., Gastonia, N.C.

High Pressure Cleaner

Produces degreasing or cleaning spray of 25 gallons per hour

Homestead Valve Manufacturing Co.: A new portable electrically-heated high pressure cleaner for automobile bodies, engines, parts, cooling systems, trucks, and driveways, is now being made. Known as Multi-Job Washer, company claims, the

Continued on page 110

Lisle
MODEL BHX
... America's
most popular

BRAKE CYLINDER HONE

Your Best Buy—Here's Why

- This one hone handles all cylinders $\frac{3}{4}$ " to 2".
- Positive pressure adjustment gives you the right "bite" in all cylinder sizes.
- Hones to the end of step-cut and blind-end cylinders.
- Flexible shaft makes it easy to hone cylinders on the car.

Made by Lisle so you know it's the Best!

ASK YOUR JOBBER

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TOOL DIVISION • LISLE CORPORATION • CLARINDA, IOWA

BIG DEAL FROM



This set of THERMOID BRAKE STANDS — a \$17.35 value —
HERE'S THE DEAL

DEAL #1



Buy any six axle sets of THERMOBOND FACTORY BONDED BRAKE SHOES at regular dealer prices.

This qualifies you for the purchase of . . .
BIG

PROFIT MAKING BONDED BRAKE SHOE DEAL

contents:



ONE SET EACH OF BX 2006-11 AND BX 292-9
(fit all '51-'58 Chevys) (regular dealer price)

\$8.24

ONE PAIR OF RUGGED, BIG **T** THERMOID BRAKE STANDS
(special dealer price)

\$8.96

ONE SET COLORFUL STREAMERS TO HELP
YOU SELL MORE BRAKE JOBS
(Shoe prices shown are exchange prices)

FREE

\$17.20

TOTAL

Profits from the sale of these two sets of shoes, \$9.30 (not including labor) more than pay for the stands — the BRAKE STANDS ARE YOURS. You recover more than the cost of the brake stands.



THERE'S NO LIMIT—ORDER AS MANY SETS, AS MANY DEALS AS YOU NEED NOW—COMPLETELY EQUIP YOUR SHOP WITH ALL THE BRAKE STANDS YOU NEED.

THERMOID DIVISION

PORTER

H. K. PORTER COMPANY, INC.

BIG DEAL FOR YOU

can be yours

DEAL #2



Buy any selection of hydraulic brake parts and fluid you need totaling \$20.00 (dealer cost)

This qualifies you for the purchase of . . .
BIG

PROFIT MAKING BRAKE PARTS DEAL

contents:



CHEVY ('51-'59) POPULAR BRAKE PARTS ASSORTMENT* (regular dealer price)

ONE PAIR OF RUGGED, BIG **T** THERMOID BRAKE STANDS (special dealer price)

ONE SET COLORFUL STREAMERS TO HELP YOU SELL MORE BRAKE JOBS

\$10.91

\$8.96

FREE

\$19.87

TOTAL

STOP

BAD BRAKES
MAKE
BAD DRIVERS

We fix brakes with
thermoid
guaranteed quality
brake materials

Profits from the sale of these brake parts (not including installation) pay for the stands — the BRAKE STANDS ARE YOURS. You recover the cost of the brake stands.

*Contains one TC 31066, one TE 32000, two TC 3600, two TC 13620

**ORDER YOUR DEALS FROM YOUR
JOBBER SALESMAN WHEN HE CALLS,
OR SEND IN THE ATTACHED COUPON
FOR THE NAME OF YOUR NEAREST
THERMOID BIG **T** DISTRIBUTOR.**

Deals Close June 30, 1961

**THERMOID DIVISION, DEPT. 300
200 Whitehead Road, Trenton 6, New Jersey**

You bet—I need some brake stands and I am interested in the
 Bonded Brake Shoe Deal
 Brake Parts and Fluid Deal

My Name _____

Address _____

City _____

Zone _____ State _____

My usual jobber supplier is _____

don't divide your income with lost time



protect your profits with a *Lathem*

PAYROLL and JOB TIME RECORDER

Consider the ways that time on the job can be wasted . . . can run up even higher your cost of doing business. For instance . . . too much delay between jobs . . . too much time on each job . . . excessive tardiness.

To correct these abuses, you need to know where they occur. And that's where a Lathem Time Recorder can do a job for you. It gives you an accurate record of the time each job is started and completed . . . when each employee arrives and leaves work. Every loss of time stands out . . . ready for you to eliminate for a better profit picture.

Mail the coupon today for complete information, prices and sample payroll and job cards.

LATHEM TIME RECORDER CO.

66 Third Street, N. W., Atlanta, Georgia

Gentlemen: Without obligation, please send me complete information, including prices, about the Lathem Payroll and Job Time Recorder.

NAME _____

COMPANY _____

STREET _____

CITY _____ ZONE _____ STATE _____

CHILTON MANUALS PAGE



By Paul A. Murphy

Editor of Chilton's
Flat Rate and
Auto Repair Manuals

Testing a Battery

Testing a storage battery to determine the general condition should be approached somewhat in the same general manner as taking an engine compression test. Each battery cell should be checked with the same amount of accuracy as is shown to individual cylinders during a compression check. Bear in mind, just as in a compression test, it is more important to read the total difference between the battery cells, rather than the top reading of the strongest cell.

If the condition is questionable, recharge the battery and make the test again. For example: (1) Readings—1.230, 1.220, 1.220—Condition: OK, (2) Readings—1.250, 1.180, 1.240—Condition: Worn-out.

State of Charge	Specific Gravity
100%	1.260
75%	1.225
50%	1.190
25%	1.155

VOLTMETER TEST. If the difference between the highest and lowest cell is .05 volts or more, the battery is nearing the end of its useful life and should be replaced. However if the highest cell reads less than 2.03 volts, the test for condition is questionable. Recharge the battery and make the test again. For example: (1) Readings—2.07, 2.06, 2.06—Condition: OK, (2) Readings—2.09, 2.02, 2.08—Condition: Worn-out.

State of Charge	Voltage Reading
100%	2.10
75%	2.07
50%	2.03
25%	2.00

PULL TEST. A load test following a full recharge is the preferred method of determining serviceability. It tests the battery under conditions which approximate starting an engine and often reveals plate wear be-

Continued on page 118

Mechanic's Eyesight Continued from page 47

Visibility in your working area can be greatly improved by a new paint job. Unpainted and dark surfaces generally don't reflect enough light. Use light-colored paints on walls, ceilings, floors and benches to diffuse and distribute more light throughout the shop. Your central work area should not be too much brighter than the surrounding area. A shiny metal part on a dark bench or machine will be too much brighter than its background. A light paint job brightens surrounding areas and cuts contrasts.

Be sure your work area is adjusted to a comfortable seeing position. Work should be centered, never off to one side (thus closer to one eye) if you can avoid it. Whether you stand or use a stool, have your work area adjustable so you don't need to bend over to see adequately (and this is especially important if you wear glasses). What is the right distance? It depends upon you, your body posture and arm length. Most of all it depends upon where your eyes see comfortably.

Store your tools and materials where they are easily visible. This may be no problem if you are under forty, but if you wear bifocals (or should) you'll find that seeing at eye level or above and 24 to 36 inches away becomes difficult. Put big and easy-to-see tools and parts in this area. Keep the smaller ones that take sharp vision to identify down where they'll be in easier range of your glasses.

Your job is a dangerous one as far as your vision is concerned. Using hand tools, pounding metal, the dust and dirt from working around cars are all potential threats to the eye. A speck of metal can easily stick in the eye and start an ulcer which can destroy vision. It might be that one in a million chance that costs an eye, but that is easily prevented. Precious eyesight can be protected when doing hazardous operations—grinding, pounding, working under cars. Simple plastic shields or safety goggles will do the job.

If corrective lenses are worn, the threat is actually greater. One inch from your eye is a piece of highly breakable glass. Unless it's top is

case-hardened for safety, or made out of the new plastic material, a bump or flying object can send a sliver of glass through your eyeball in an instant.

But your eyes themselves are the most important tools with which you work. No matter how good your seeing environment or your postural habits, unless your eyes perform as they should there will be a sacrifice in either comfort or performance. Don't be fooled be-

cause you have $2\frac{1}{20}$ eyesight. This may be desirable, but it alone is no guarantee you can see as you should for mechanical work.

The term " $2\frac{1}{20}$ " refers to the size of letters which are readable 20 feet away. These letters are about $\frac{3}{8}$ of an inch high. Most eyes are able to read letters of $2\frac{1}{20}$ size, though proper lenses may be necessary. If the letters must be made larger in order to be identified, the denominator of the fraction becomes larger; for example $2\frac{1}{40}$, $2\frac{1}{60}$, $2\frac{1}{100}$, and so on. The

Continued on page 100



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From Graco hose reels in the lube bay to Graco pumps in the back room, the Graco team means faster, better and more profitable lubrication service.

Designed for the service departments of tomorrow, Graco lubricating equipment works fast and looks good!

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TEMP-O-MATIC
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- Remanufactured and assembled with new seals and bearings
- Every unit pressure-tested and fan belt run.

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- Completely remanufactured, pre-run and Flow-Meter tested.

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BRAKE-O-MATIC
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- Every unit steel sleeved to assure perfect braking action
- Tested under actual driving conditions.

COST



POWER-O-MATIC
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- Every unit completely remanufactured to precision standards
- Individually packaged in attractive, easy-open boxes.

S. A. Shenk & Company offer the most complete line of remanufactured auto parts. Units available for every make and model — not just a few. *Buy the best* and offer your customers greater savings with higher profits for you. Every part unconditionally guaranteed. Write for jobber nearest you.

S. A. SHENK & CO.
America's Largest Remanufacturer of Auto Parts
COLUMBUS 7, OHIO

Clearing House Continued from page 90

been a complaint of three of our regular customers. The action comes from the rear of the automobile and travels through the car giving a very apparent thud. This occurs when the car encounters a slight dip or raised area in the road. It doesn't matter how fast or slow the car is traveling. First thought was, of course, bad shock absorbers. They were checked and double checked when the condition persisted. It is not the shocks. Next we checked the springs, repacked them still no good. Splines were filed, again no good. The car is a 1957 Ford Custom 300 V8 Automatic Transmission. Incidentally, one of our customers advises that he had an extra leaf added to his springs, but it did not help the situation. It's a perplexing problem. Can you be of help? It would be most greatly appreciated by all concerned.

Michael E. Terita
Bridgeport 8, Conn.

THIS particular thud, which is annoying, is happening on a lot of these jobs. From what we gather the noise comes from

the drive shaft, where it slides into the transmission tail shaft. Some mechanics have been drilling a hole in the washer on the end of the joint. Others pack the spline with special compounds and some have installed a small coil spring inside the joint for cushion. I have seen caster shims installed at the rear spring "U" bolts. All the above remedies have worked out on some cars. I would suggest considering them in your case.

Service Station

Continued from page 51

area is cleaned and grease or oil spots are removed. The bays are never cluttered. If there are any items removed from a car; such as, tail pipe, muffler, etc., it is removed from the area.

Each evening the bay room floor is scrubbed. All tools and equipment are checked for cleanliness and proper storage. This care of tools and equipment is also extended to the outside appearance of the station. All curbing and islands are kept freshly painted all year round.

This station is on a corner location with a long driveway with parking accommodations for approximately twenty automobiles. An outside tire cabinet produces a massive display of tires. A impressive spectacular curtain sign enhances the outside of this location of which Mr. Rossi is very proud. Rossi's station location is probably the only one in the Pittsburgh area which can boast a sign of this nature.



"No make or model is left uncovered by Autolite spark plugs" is the message Miss Joy Hoffman brings to dealers across the nation now that the company has extended coverage to racing engines of all types.

The Mechanic's Best Friend!



The super-penetrating rust solvent that quickly loosens rust and corrosion.

YOUR JOBBER HAS IT!
RADIATOR SPECIALTY CO.
CHARLOTTE, N. C.

AMMCO
WORLD RENOWNED
SAFETY
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**YOUR PROFITS
GROW WHEN YOU
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When you buy an Ammco Brake Shop, you're buying the most popular and easy-to-use Brake Service Equipment available. The Ammco No. 20 Mobile Brake Shop enables you to do complete, accurate, profitable brake jobs . . . it will turn current customers into more profitable customers and will help attract new customers. In addition you'll be personally trained in how to get the most out of your equipment, and available to you . . . a complete merchandising and promotion program to help you get into profitable brake servicing immediately.



Write today to see the industry's most comprehensive merchandising and promotion plan . . . designed to help your brake service grow!

You expect more,
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from AMMCO

- **COMPLETE**—You don't have to buy "extras" to handle everyday jobs.
- **ECONOMICAL**—Pays for itself, plus a profit with only one complete job a week.
- **RUGGED**—Sturdy, precision construction for years of trouble free service.
- **MOBILE**—Do brake work outdoors or anywhere indoors.
- **SELLS** Brake Service. Complete, effective Dealer Promotion Program.

No. 20 Brake-Shop-On-Wheels complete with Drum Lathe, Shoe Grinder, Drum Mike, Brake Hone, and other accessories.

NO DOUBT ABOUT IT



IS THE BUY

AMMCO TOOLS, INC.,
2100 Commonwealth Ave., North Chicago, Illinois

here's
the
secret
to the

first and only
controlled output
timing light



Only the completely new HT-800 Timing Light has a voltage matching switch that locks out the "wrong" voltage. *Nothing burns out!* The bright light through the optically ground lens flashes only when the battery voltage and switch position match—and it is equally as brilliant on 6 or 12 volt systems.

For twice the normal service life, the HT-800 also boasts an exclusive under-load circuit. For safety, it has a tough, high-impact plastic case that is electrically non-conductive... easy to keep clean and new-looking. It's your best buy for long-time, trouble-free service—backed by a one-year guarantee. Ask your jobber.

Herbrand Equipment

HERBRAND DIVISION
THE BINGHAM-HERBRAND CORPORATION
FREMONT, OHIO

Mechanic's Eyesight Continued from page 97

bigger the second number, the more blurred the vision—some people without their glasses have $2\frac{1}{100}$ vision or worse. If very small letters can be seen, the vision might be as good as $2\frac{1}{10}$ though this is rare.

A person whose vision is $2\frac{1}{10}$ would require letters twice the size of those necessary for $2\frac{1}{20}$ vision, while $2\frac{1}{100}$ letters would be five times as large. This does not mean $2\frac{1}{100}$ is therefore five times worse than $2\frac{1}{20}$. It is worse, yes, but not in direct proportion to the size of the fraction.

How much worse $2\frac{1}{100}$ vision is than $2\frac{1}{20}$ vision depends upon other factors. This expression is but one of all the many skills a pair of eyes must have. It indicates only how clearly they see at distance; it tells nothing of the indirect fields of vision, the eye muscle action or the ability to see at a close point. Above all, it does not indicate how much "effort" or nervous energy may be necessary to keep vision clear, and this is what is so important to the mechanic.

What the mechanic especially needs is sharp near vision. The term $2\frac{1}{20}$ can be used to refer to the clearness of near vision, measured with appropriate sized letters. But a person can easily have $2\frac{1}{20}$ for distance and only $2\frac{1}{200}$ for near, or vice versa. Even with sharp seeing up close, the eyes must be able to hold that focus, and often do it for a prolonged time. How well your eyes can automatically focus is partly due to your age.

Casual inspection of parts, studying, catalogs or reference charts, and reading is usually done around 16 to 18 inches from the eyes. This is about the same as an average "reading" distance. However, it depends upon individual habits, arm-length, and working environment. You should measure and know your visual seeing distance for your most common nearwork.

However, the mechanic's most troublesome problems come from the unusual seeing heights and distances of his work. Once the bifocal stage has been reached, and it does for everyone in the mid-forties, the work demands become particularly significant. This happens for opti-

cal and physiological reasons, lenses can be made to focus for any desired distance, but not all distances. Bifocals made for reading for example will have many limitations for use in doing mechanical work.

Sometimes a job must be done as close as 12 inches from the eyes, lenses which produce this much focus power will have a limited outward range, and increasingly so after age 45 to 50. Yet vision at arm's length is absolutely essential, often because of the physical impossibility of getting closer to the motor or a part of the frame or body of a car.

Head position also complicates the problem. Seeing which must be done at eye level and as close as 12-14 inches is most difficult with ordinary bifocals. Working on a coaster under a car is no place for glasses made for reading the newspaper. Working under the dash may require looking through the top of glasses to see up close. At times, seeing must be done in almost every conceivable position.

What are the solutions to some of these difficult seeing problems? It depends mostly upon the individual mechanic, the condition of his eyesight, his own postural habits, and of course upon how many difficult seeing jobs he must do. If he specializes in tune-up, or body repair, or transmission work, his vision must be fitted for that purpose. Be sure you know your actual seeing heights and distances, not estimates, but exact measurements made while you work. Take this information with you when you have your eyes examined.

Here are some possible ways glasses can be made for mechanical work when you reach the bifocal age:

Single vision lenses: The big advantage is that near vision is possible through any part of the lens, no need to tilt the head and crane the neck to see. However, focused for closework as they are, distance vision is blurred through such lenses and they would need to be removed to see clearly beyond a few feet. They are ideal for working under the car and in difficult positions.

Continued on page 109

NOW FOR SPRING AND SUMMER FUN...
A WHOLE NEW SELECTION OF GIFTS
ABSOLUTELY FREE!

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SELL FRAM FILTERS... GET FREE GIFT CERTIFICATES... REDEEM FOR FREE GIFTS... ➤

GIFTS FOR FUN, SUN, HOME AND GARDEN ABSOLUTELY FREE !!!!!

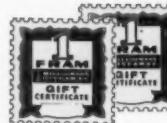
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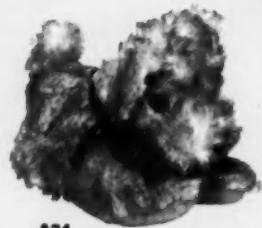
A21



A22



A23



A24

- A21 GREEN SPOT DELUXE SPRINKLER—3 solid brass arms. New convenient handle. Sled runners.
- A22 G. E. CLOCK—"The Dorm Alarm", beige case, white dial, brown numerals.
- A23 FIELD & STREAM KNIFE COMBINATION—3-pc. set. Includes a hunting, camping and fishing knife.
- A24 SHAGGY DOG—Long piled plush, felt tongue, black nose, eye patch, button eyes.
- A25 CANNON TOWEL SET—2 terry hand towels, 2

2 GIFT CERTIFICATES
(Free with 2 Dozen Cartridges)



A25



A26



A27



A28

wash cloths. Cotton ball decoration. Derby border.
A26 PFLUEGER FISHING FLIES—Slide-O-Matic transparent box. 1 doz. assorted streamers, wet flies.
A27 DEAUVILLE 2 PC. SHEFFIELD CARVING SET—Extra heavy gauge, hollow ground, carving knife. Forged fork. Luxtrex handles. Chrome bolsters.
A28 WEBERLITE "TRUE-TEM" MINNOW BUCKET—High-insulation plastic. Wire frame and handle. Highly buoyant. "No-loss" cover.

3 GIFT CERTIFICATES
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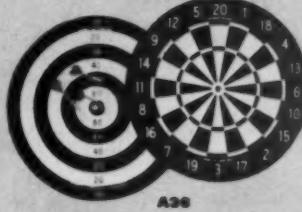
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A32



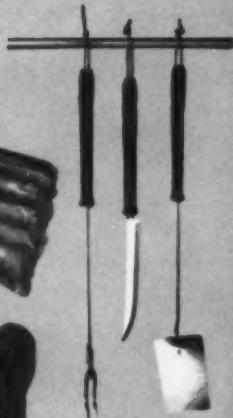
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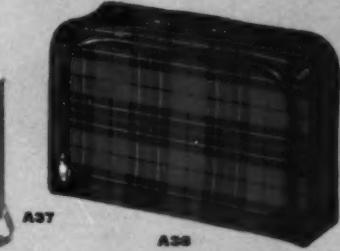
A36



A37



A36



A38

A31 HAMPSHIRE AIR MATTRESS—Built-in foot pump inflates mattress in 30 sec. Rapid deflate valve. 75" x 30" with attached pillow section.

A32 SKOTCH KOOLER—Giant 4-gal. size. Durable super-hard finish. Brilliant color combination.

A33 THERMOS "ICY-HOT" PICNIC JUG—1 gal. capacity. Extra thick fiberglass insulation. Exclusive wheel-type faucet. Leak proof.

A34 RAWLINGS GOLF CLUB HEAD COVERS—4 heavy tan leather covers. Fully lined. Contrasting numerals.

A35 IMPERIAL 3 Pcs. BAR-B-QUE SET—Stainless steel slicer, turner, fork. Oversize handles, leather thongs.

A36 DART GAME—Two-sided Dartboard 18" diameter. Features target, 20 point games, 3-5" metal darts.

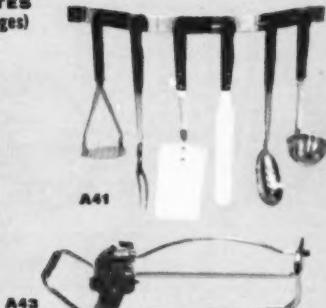
A37 UNIVERSAL "SPECTATOR" BEVERAGE KEEPER—Keeps liquids cold or hot—36 hours. Leather-like tan case. Shoulder strap. Qt. capacity, with caps.

A38 FLYWEIGHT WEEK-END CASE—Woven rayon plaid. Zippered. Rubber lined against wear and weather.

4 GIFT CERTIFICATES
(Free with 4 Dozen Cartridges)



A42



A41

A43

A41 IMPERIAL 7-Pc. KITCHEN SET — Stainless steel. Wonde-wood handles. Ladle, turner, spoon, fork, spatula, potato masher, metal rack.

A42 BANLON SPORT SHIRT — Short

sleeved. Ribbed waist band. Wash-and-wear. Green, beige or gold. S,M,L, X-L.

A43 GREEN SPOT OSCILLATING SPRINKLER — New convenient handle. Sled-type base. Can be moved while operating.

6 GIFT CERTIFICATES (Free with 6 Dozen Cartridges)



A61

A62

A64

A61 FITTED PICNIC BASKET — Varnished fibre. Rack and stainless steel cutlery, plastic plates and cups for 4.

A62 MIRRO ALUMINUM 14-Pc. CAMP & PICNIC SET — 2, 4 & 8 qt. kettles: 9" & 10" fry pans, 4 plates, 4 plastic cups, 2 qt. coffee pot, 2 fry pan handles.

A63 "FEATHERLITE" NYLON PARKA — Zipper front, rubber lined, convertible collar. Sizes: S,M,L,X-L.

A64 PFLEUGER FLY ROD AND REEL SET — "Progress" fly reel. High quality ferrules, guides, reel seat. Tubular glass rod with terrific action. Cork grip.

A51 RADIO STEEL GARDEN CART — For Lawn & Garden. Recessed puncture-proof wheels. "Cengo" Graphite bearings.

A52 IMPERIAL 24 Pcs. STAINLESS STEEL FLATWARE — 6 each of knives, forks, spoons, teaspoons in modern pattern.

7 GIFT CERTIFICATES
(Free with 7 Dozen Cartridges)



A71

A72

A73

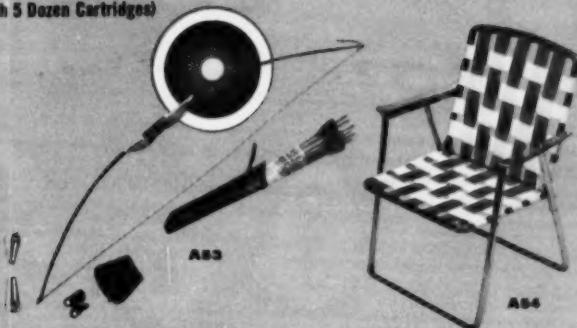
A71 WEN-MAC "DAUNTLESS" DIVE-BOMBER — Drops a bomb "in-flight". Operational tail hook. 22" wingspan. Automatic starter engine.

A72 RADIO STEEL "FLYER" WAGON — America's most popular! 36" x 15½" x

4½". Automobile-style tires.

A73 IMPERIAL 5 Pcs. KNIFE SET — Stainless steel, hollow ground blades. French chef's knife, narrow blade slicer, utility butcher knife, utility knife, paring knife.

IFT CERTIFICATES
(with 5 Dozen Cartridges)



10 GIFT CERTIFICATES
(Free with 10 Dozen Cartridges)



12 GIFT CERTIFICATES
(Free with 12 Dozen Cartridges)



14 GIFT CERTIFICATES
(Free with 14 Dozen Cartridges)



A141

A141 THERMOS "POSITEMP" ICE CHEST—Holds 40 12-oz. bottles, 70 lbs. of ice. Food tray, drain, attached bottle opener. Light, sanitary, leak-proof. A142 RAWLINGS GOLF BAG—4-stay model. 2 covered metal dividers. Molded rubber handle and



A142



A143

bottom. Accessory pocket, large ball pocket. Umbrella holder, hanging hood.

A143 RAWLINGS GOLF CART—New fold-up cart with 10" spoke wheels. Ball bearing construction. Adjustable knee action. Holds any size bag.

18 GIFT CERTIFICATES
(Free with 18 Dozen Cartridges)



A181

A181 LAMBERT "AMBASSADOR" LAWN SWEeper — Flip exclusive HITE SELECTOR lever to sweep 25" path on driveway or lawn. Hamper lifts out.

A182 WESTINGHOUSE 6 TRANSISTOR PORTABLE RADIO—Large easy-to-turn dial. Full tone speaker. Automatic volume control. Built-in ferro-core antenna. Grey saddle stitched travel case. Batteries included.

24 GIFT CERTIFICATES
(Free with 24 Dozen Cartridges)



A241



A242



A243

A241 WESTINGHOUSE "RIVERIA" FAN—Whisper quiet. Two speeds. Use as table or hassock-type fan. Exclusive safety blades. Westinghouse 5-year guarantee.

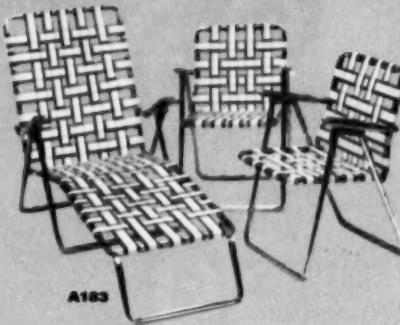
A242 WARING DELUXE BLENDOR — Chrome model. Two speeds. One-piece Pyrex jar with built-in stainless steel cutting blades. Blends, chops, mixes. UL & CSA approved.

A243 CHANNEL MASTER TRANSISTOR RADIO—Portable, cordless, table model. 6 transistors. Works on 4 flashlight batteries. Rich, big tone. Caramel with white and gold trim.

A244 KESTRAL KATAMARAN MARK I BOAT—6 pontoons. Aluminum mast and boom. Tubular aluminum frame. Sturdy front stabilizer fin and rudder. Rugged oak cross-bars.

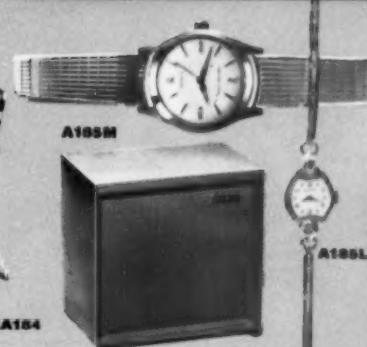


A244



A183 ALUMINUM FOLDING LOUNGE SET — Four-position contour chaise lounge, 2 yacht chairs. Polished aluminum with woven plastic webbing. Lightweight, quick folding, weatherproof.

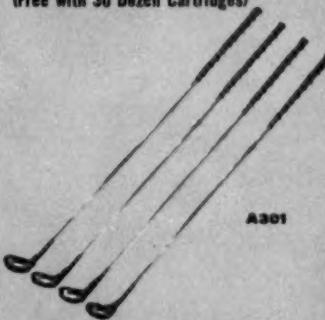
A184 FRAM ROOM AIR CLEANER — Keeps air hospital clean, free of odors. Kills 99+ % of germs trapped in exclusive Fram "Permacheim"-treated filters.



A185L BENRUS WATCH — "Lady Pat". 17 jewels, gold top, stainless steel back, unbreakable mainspring. Expansion bracelet.

A185M BENRUS WATCH — "Water Baron". 17 jewels. Guaranteed waterproof. Stainless steel case, luminous hands, shock-absorbing movement, unbreakable mainspring. Expansion bracelet.

30 GIFT CERTIFICATES
(Free with 30 Dozen Cartridges)



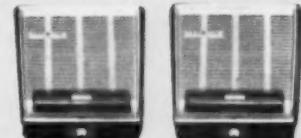
A301 RAWLINGS 4 SWING-MATCHED GOLF WOODS — 1, 1 1/2, 3 1/2, 4 1/2. Bill Ogden autograph. Solid persimmon heads. Flomatic shafts. Leather grips. Large sole plates.

40 GIFT CERTIFICATES
(Free with 40 Dozen Cartridges)

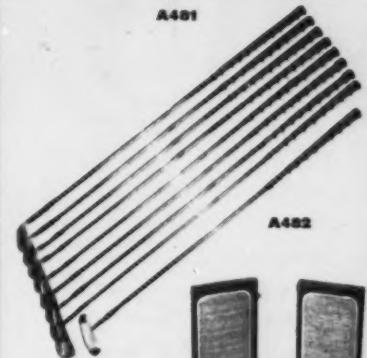


A401 THERMOS POP-TENT CAMPER — Fiberglass rib supports. Pops up in 90 seconds. Sleeps two. Sewn-in floor, zippered net. 30" carrying bag.

48 GIFT CERTIFICATES
(Free with 48 Dozen Cartridges)



A481



A482



A483

A481 G.E. PORTABLE 2-WAY INTERCOM — Needs only to be plugged into existing outlets of 105-120 volts AC. Many uses at work or in the home for room to room communication.

A482 RAWLINGS 9 SWING-MATCHED GOLF IRONS — 2, 3, 4, 5, 6, 7, 8, 9 and putter. Bill Ogden autograph. Back-weighted heads. U.S.G.A. approved face scoring. Leather grips.

A483 WESTINGHOUSE PORTABLE STEREO — Two lift-away speakers can be placed up to 15 ft. apart. 4-speed changer. Dual sapphire stylus.

120 GIFT CERTIFICATES
(Free with 120 Dozen Cartridges)



A1201. DRIVEX 1961 "COMPETITION" KART—Powered by Clinton A-400 engine. Speed range: 20-40 mph. Pneumatic tires. For racing or family fun. Extra mounting plate for second engine.

144 GIFT CERTIFICATES
(Free with 144 Dozen Cartridges)



A1441 ZENITH "ROYAL 1000 D" TRANSOCEANIC RADIO—Combination standard and short wave portable. 9 transistors. Smallest, lightest, most powerful made. 9 wave bands.

NOW FOR SPRING AND SUMMER FUN
A WHOLE NEW SELECTION OF GIFTS
ABSOLUTELY FREE !!!!!

FRAM

MILLION\$\$\$\$
GIVEAWAY

Free gifts are easier to get than ever because
Fram Filters are easier to sell than ever!

PRODUCT: New Fram "Wear-Guard" Filters are the greatest advance in engine protection since detergent oils!

POSTERS: Brilliant new billboards sell new Fram "Wear-Guard" Filters in major traffic areas!

POST ADVERTISING: Fram "Wear-Guard" Filters are featured in Saturday Evening Post with 13,455,000 readers.

POPULAR SCIENCE: 8-page booklet in April issue, titled: "How Your Car Can Save You Money."

PLUS RADIO: New, different, radio commercials sell new "Wear-Guard" Filters on network radio.

FRAM FILTERS: OIL, AIR, FUEL, WATER

YOUR FIRST LINE OF ENGINE PROTECTION

FRAM CORPORATION, PROVIDENCE 16, R. I.

Mechanic's Eyesight

• • • • Continued from page 100

The seeing range, inward and outward, which they provide depends upon their power and the ability of the eye to do some focusing on its own. They can be focused for whatever distance you wish but they will be of little value for other distances.

Bifocals: There are many kinds of them, differing in size, shape, and position in the lens. Small and low ones are better for walking but give less seeing area for work. The bigger and higher they are, the less head tilt necessary on the job. The advantage of bifocals is that they make it possible to see at a distance (without removing them as is necessary with single vision glasses) because the upper part of the lens carries any necessary distance correction, or it can be plain glass which has the advantage of eliminating the blur of the near lens. Bifocals can be made with only a small window of distance vision at the top, the rest of the lens providing a big near seeing area. Some type of bifocal is generally necessary for the mechanic, particularly to walk and move around as he must; if it sets high and is large it generally suits his work needs best, though he may not like it as well for off-duty use.

Trifocals: Eventually no single lens prescription will provide vision at all the necessary nearwork distances. Glasses which produce good vision for working on a car at arm's length will not give the necessary sharp seeing to check a valve seating at 12 to 14 inches from the eyes, and vice versa. Trifocals have a third area of focus designed for seeing at intermediate distances, farther out than the bifocal section and closer than is possible with the distance correction, generally it is good at about arm's length distance. There are a number of ways trifocals are made, the intermediate section can fill most of the middle of the lens, or it can be a narrow band just above the bifocal. The power of the middle section can actually be made for whatever distance is desired. To work the best, trifocals should be made strictly as a vocational lens, the segments designed in size and position for exact

work needs of the individual wearer.

What kind of lenses should you choose? Don't decide that for yourself. Discuss the matter with your refractionist, be sure he knows all about your work needs. Some mechanics do best in trifocals, others have single vision lenses for certain jobs and wear work bifocals the rest of the time. In some instances, spe-

cial vocational lenses are the only answer—for example a double bifocal with a section at the top for near seeing overhead (can be useful working under a car on a hydraulic lift).

Glasses for work? More than one pair? How many tools do you have to do special jobs? Glasses are tools also—perhaps the most important ones you have—and they can have a lot to do not only with comfort and efficiency but downright pleasure in your work as well.

 MORRIS
 Austin-Healey
Each one of these fine cars
  MG
 AUSTIN
 FERRARI
 B
comes Lucas equipped. For
 ROVER
 CITROËN

satisfied customers always
 SIMCA

replace Lucas with Lucas.

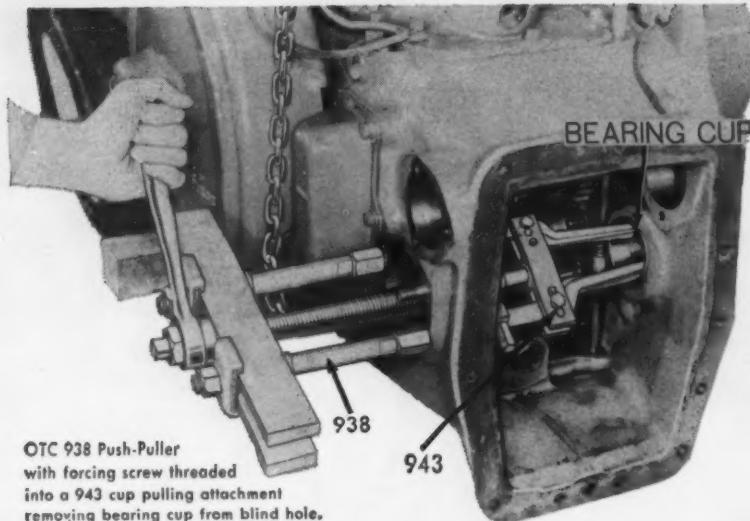


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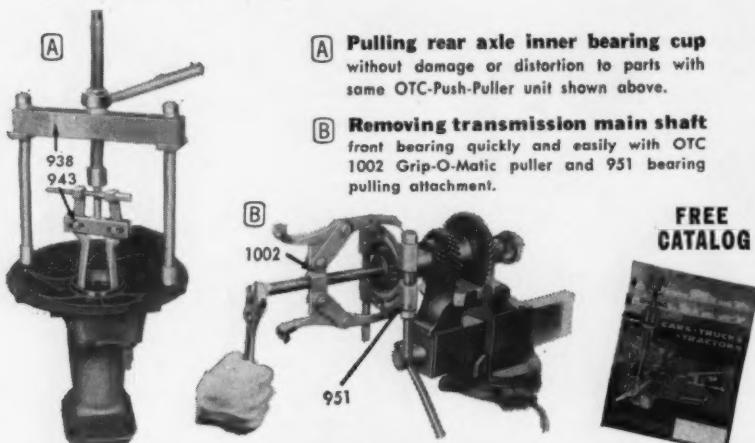
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OTC 938 Push-Puller with forcing screw threaded into a 943 cup pulling attachment removing bearing cup from blind hole.

Save time, cut costs in removing and installing cups, bearings, gears, seals, pulleys, etc., with versatile OTC pullers

Save time, up profits by having the right tools in your shop to get the job done quickly, safely, easily — versatile OTC pullers with attachments. Manual or hydraulically operated . . . fit all makes of equipment. Complete hydraulic maintenance sets available in 17½, 30 and 50-ton capacities.



See your OTC distributor or write for further information:



New Products

Continued from page 93

new unit produces a degreasing or cleaning spray of 25 gallons per hour at 300 pounds pressure and 100 degree rise in solution temperature. It also produces a wash-rinse spray of 90 gallons per hour at 250 pounds pressure and 25 degree rise in solution temperature. Concentrated solution tank and solution metering valve provide controlled cleaning action for cleaning. Write: Homestead Valve Mfg. Co., P. O. Box 348, Coraopolis, Pa., or 'phone Amherst 4-3240 and Federal 1-3556.

Air Conditioning . . .

Continued from page 53

other service complaints involve the controls and minor adjustments.

According to Mr. Miller, the best sales argument is that a car owner should be comfortable in Summer as well as in Winter, hence cooling is needed as well as heating, and most people have heaters. He quotes a price to include the installation and terms are extended if desired.

Calendar of Events

March 13-14—Louisiana Automobile Dealers Association, Roosevelt Hotel, New Orleans.

March 20-22—Motor Vehicle Maintenance Conference, Univ. of Washington, Seattle, Wash.

March 26-28—Iowa Automobile Dealers Assn. Meeting, Hotel Fort Des Moines, Des Moines, Iowa.

April 13-15—43rd Anniversary National Truck, Trailer & Equipment Show, Great Western Exhibit Center, Los Angeles, Calif.

April 23-25—Automotive Trade Assn. of Virginia meeting, John Marshall Hotel, Richmond, Va.

April 27-29—Upper Midwest Automotive Trade Show's Service Clinic, Minneapolis Auditorium, Minn.

April 30-May 2—Michigan Automotive Wholesalers Assn. meeting, Pantlind Hotel, Grand Rapids, Mich.

May 11-13—Pennsylvania Automotive Assn. meeting, Hilton Hotel, Pittsburgh, Pa.

Stop Ring Plugging Worries

with Pedrick

Formflex Chrome

Piston Rings

Reproduction of unretouched photograph of piston after normal life's service in an engine—showing free and open condition of Pedrick Formflex Chrome Oil Ring.

Protect and build your reputation for the most successful piston-ring and engine-overhaul jobs by guarding against ring plugging. Always use Pedrick Formflex Chrome oil rings. Pedrick's exclusive 4-piece construction gives you the greatest assurance that any tendency to plug will be broken up at the start. All *four* pieces are free to move independent of each other in the groove. Each one fights against plugging. In abutment-type oil rings, only Pedrick has such effective means to stop plugging.

In addition, PEDRICK FORMFLEX CHROME PISTON RINGS are:

- Easy to install!
- Effective in Side Sealing!
- More conformable!
- All-Purpose—for any kind of service!
- Chrome-faced for longer life!

DEPEND ON

Pedrick
FOR THE BEST RING JOB

expand spark plug sales with AC's complete line



When you stock ACs, you become a one-stop source for spark plug needs for cars, trucks, boats and power mowers. ACs are your assurance of complete customer satisfaction in every power need.

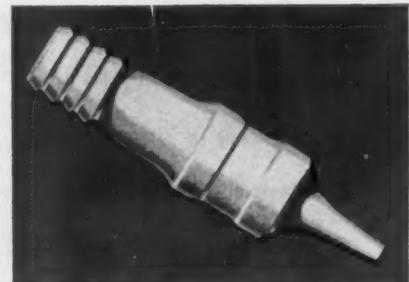
put these exclusive AC sales features to work for you



LONGER LIFE. Superior sealing with positive gas-tight construction. This assures constant operation within required heat range for greater gas economy and longer spark plug life.



BETTER SPARKING. "Isovolt" Electrodes are made of special alloy metal for best sparking qualities. They are more massive; they operate cooler and last longer.



GREATER RELIABILITY. Patented Ceramic Insulator with near-diamond toughness resists breakage; this cuts electrical leakage, giving the user quicker, surer starts.

...and make them easier with AC's packaging

**AC'S PACKAGING SIMPLIFIES INVENTORY, MAKES YOUR
JOB EASIER AND ACTUALLY HELPS YOU SELL SPARK PLUGS**



FOR CAR AND TRUCK

AC's 8-Pac of Fire-Ring Spark Plugs gives you the number of spark plugs you most often need for the job. It eliminates storage headaches. The 8-Pac is clearly identified for each profit-making spark plug change.



FOR BOAT

AC's new waterproofed "Twin-Pac" contains two rustproofed AC Marine Spark Plugs—attractively packaged for quick selling. AC's marine line includes spark plug types for all popular outboard engines.



FOR POWER MOWER

AC's power mower spark plugs come on colorful display cards—each spark plug packed individually in a waterproofed "Bubble Pack." Three popular types of AC Spark Plugs cover almost the entire power mower market.

If you're not already an AC dealer, cash in now on the profit opportunities open to you. Stock and sell the complete AC Spark Plug line. AC dealers have the product that's best for all cars, trucks, marine engines and power mowers. You have the benefits of AC's packaging for easier sales. You also have strong promotion that's designed to create more sales and help you move merchandise. Contact your nearest AC supplier, now.

AC SPARK PLUG THE ELECTRONICS DIVISION OF GENERAL MOTORS

**And here are some other
advantages you get when
you stock and sell AC:**

- Wide accessory line of the highest quality products—sold and promoted by qualified field personnel.
- Extensive advertising and merchandising campaigns for top-notch sales support.
- Better profit margins through faster turnover; plus, AC's continuous product improvement policy.
- Greater spark plug replacement potential—because ACs are original equipment on more new cars than any other brand.

get the selling edge with profit AC^Achievers!

COMBUSTION LEAK?

DON'T GUESS—
BE POSITIVE
TEST IN
ONE MINUTE!

P&G

BLOC-CHEK

COMBUSTION LEAK TESTER

SPOTS and LOCATES
COMBUSTION LEAKS

- LEAKY GASKETS
- CRACKED OR
WARPED HEADS
- CRACKED BLOCKS



At the very first signs of engine HEATING, LOW WATER, HARD STARTING and RUSTY RADIATOR CONDITIONS—check the cooling system with P&G BLOC-CHEK! With engine idling, place the BLOC-CHEK in radiator opening. Squeeze bulb to draw air sample from cooling system and through BLOC-CHEK test fluid. If combustion gas is leaking into the cooling system the test fluid changes from BLUE to YELLOW. It's a modern miracle of chemistry—and absolutely accurate in spotting combustion leaks, even though the leak is very small.

BLOC-CHEK WILL DETERMINE THE EXACT CYLINDER WHERE THE LEAK IS OCCURRING.

After a positive reaction (color change), the exact location of the leak can be determined by removing one plug at a time and retesting.

WHEN NON-LEAKING CYLINDERS ONLY ARE FIRED, THE LIQUID WILL REMAIN BLUE.

WHEN A LEAKING CYLINDER IS FIRING, THE LIQUID WILL CHANGE TO YELLOW.

BLOC-CHEK

is the only accurate method of determining whether or not a combustion leak exists!

Kit includes BLOC-CHEK and TEST FLUID in unbreakable box.

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• PORTLAND 17, OREGON

Please ship BLOC-CHEK KIT(s) at \$19.75 each.
 Please send additional information.

Name..... Address.....

City..... State.....

Check Encl. (Ship. Charges Prepaid) C.O.D.

Open Acct. (D&B Rated)

Ed Kossman

Continued from page 40

plays an important role in this game. Furthermore, in the light of present profits we better guess right or a lot of us won't be around to *guess at all* in the not too distant future . . .

First, let us consider the market, or opportunity, for increased parts and service business. We feel that the production of these cars has and will lead to a further—but not great—expansion in the total number of new cars that will be sold in any one year. It is axiomatic that the greatest source of dealer parts and service business is the New car owner. There will be some increase in the service potential. Probably more important is—that regardless of the increase in the total market a larger portion of the total service business will be in the Compact lines if for no other reason than the increased percentage of compacts that will be operating.

Tom Costello

Continued from page 41

Many customers, after you have given them your figures, want to go out shopping to see how they stack up. Well, we devised a system to forestall this kind of shopping. After we had given a customer his figures and just as he was going out the door, we called him back and said: "Wait, Mr. Jones. We have a gift for you." Our salesman went to a freezer we had on the showroom floor and gave the prospect a half gallon of ice cream. Now where can you go on a hot summer night with a half gallon of ice cream, but home? He won't go to another dealer to shop and let the ice cream melt in his car, nor will he throw it away.

In addition to being a merchandiser, you must practice economy every possible place in your business. You must become more efficient, broaden your base if necessary, by increasing finance and insurance penetration, leasing if it is advisable, by increasing your parts and service absorption, by better gross on your trucks. Use every profit-making facility you have at your command to bring more gross profit through your doors. Invest in better tools to do the job more efficiently. Order cars in keeping with your needs to help hold down floor plan costs and do whatever else is necessary to make your operation more efficient.

**if you service brakes,
you need this
New.. COMPACT CATALOG
that provides BROAD COVERAGE of**

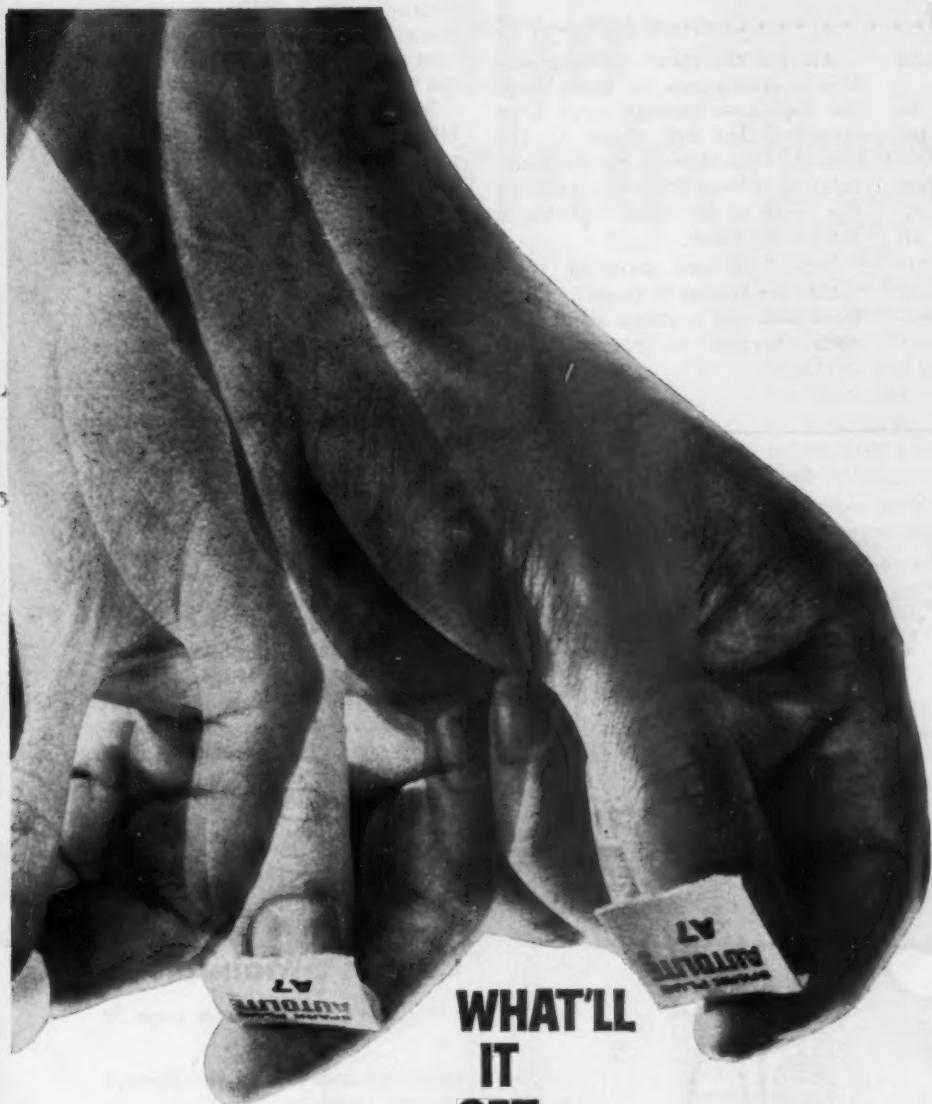
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**WHAT'LL
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GET
YOU
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You name it. There's a whole catalog full of dandy items you can get absolutely free with Autolite Spark Plug box tops. Watches, encyclopedias, over 500 separate gifts, all free . . . if you sell Autolite Spark Plugs. All you do is tear off the part number end tab from each Autolite Spark Plug box. When you've got a nice pile of

tabs saved up, just look through your catalog and tell us what you want. Enclose the required number of end tabs. It's that simple. You don't sell Autolite Spark Plugs? Here's what to do. Call your Autolite supplier. He'll be over pronto with the whole program and enough spark plugs to get you started. Phone him now.



AUTOLITE
SPARK PLUG DIVISION • TOLEDO 1, OHIO

Modern Paint Dept. Continued from page 45

permits simultaneous painting and baking.

Although the spray booth is located almost exactly in the center of the shop, it does not interfere with working conditions in the shop area. With the doors closed, painting can take place at any time. All paint fumes and overspray are exhausted through a low-level exhaust system and an overhead duct system to the outside of the building.

Air for the spray painting section is drawn into the booth from the shop area through large filter elements that are placed in the doors. Thus there is constant circulation of clean filtered air through the booth at all times, insuring a top quality finish.

Import Motors' painting techniques are similar to those found in most body and painting shops. The metal surface is prepared and

cleaned in the usual manner, using machine and hand sanding and solvent rinses. All this is done outside the booth.

Masking follows, and the automobile is rolled into the spray booth and the doors closed. Import Motors uses two coats of primer, with sanding in between the first and second coat. After this is completed, the finished color is sprayed on. This is then followed by baking. The baking oven is a mobile rig that moves back and forth on tracks set in the floor. This permits the car to remain stationary as the oven moves.

A total of 54 infra-red lamps are mounted on the rig, arranged with a bank of lamps on either side and a third bank of lamps on top. This particular design permits a savings in initial investment since it is not necessary to purchase as many lamps as would be required in a stationary installation.

All color paint is original Volkswagen paint imported from Germany. With the combination of original paint, modern spray installation, and infra-red baking oven, the company can produce a finish that is tough, durable, and good looking as the original factory finish.



With TRAMCO AUTOMATIC TRANSMISSION and POWER STEERING Parts, you do a better repair job faster because you're using the best parts made—manufactured to original equipment standards.

Tramco's "exploded view" cataloging, "see through" packaging, "instant identification" PLUS easy-to-use kits save you hours in labor and parts acquisition time.

For "like new" repairs on
Automatic Transmission
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Chilton's Manuals . . .

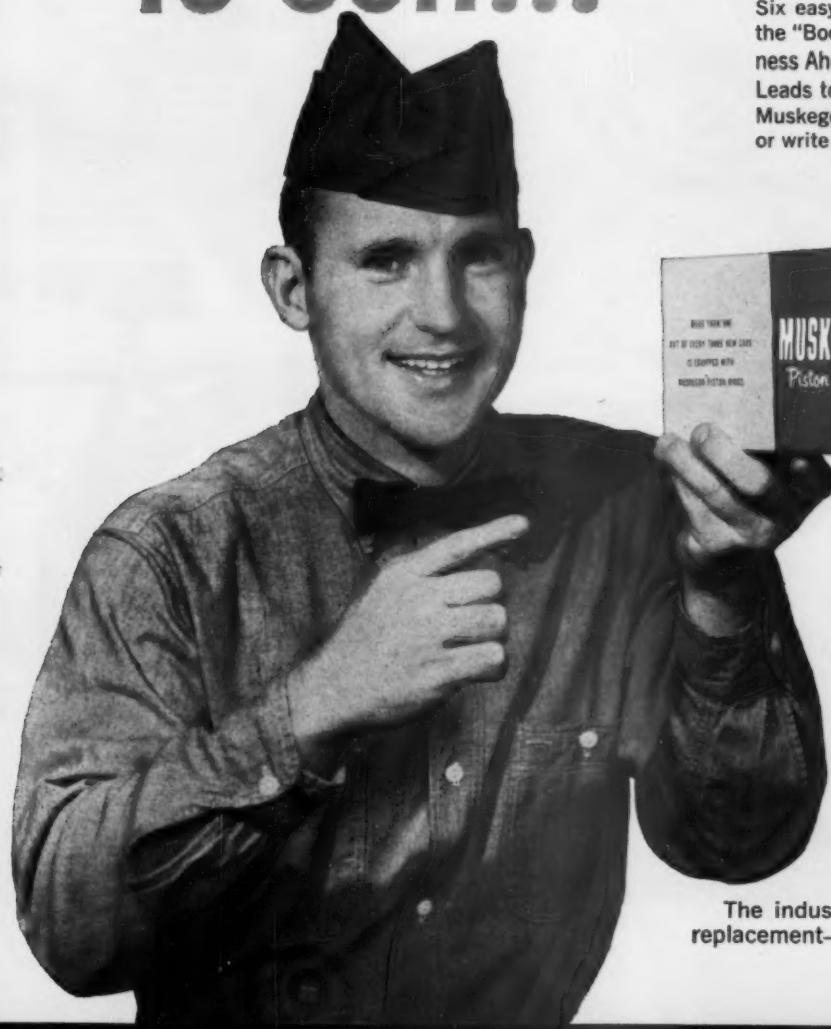
Continued from page 96

fore it becomes evident as difference between the cells.

There are two widely used methods of running a load test. One is to load the fully charged battery by turning on the headlights and engaging the engine starter, and at the same time use a voltmeter to check the voltage drop on each cell respectively. Another is to remove the battery from the vehicle and place it on a load type tester, then load it according to the gage manufacturer's specifications.

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10th Annual Fix
Fax Issue**

try the piston ring set* that's exciting to sell...

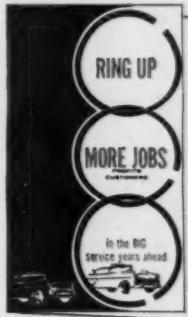


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make faster, easier sales for you. When you sell and install an "Engine-Dated" set, you know you're installing the very best combination of rings ever developed for the particular engine into which they're going. There's no guesswork on your part as to what grade you should install...you install only the very best. You and your customers get important savings too, from the distributing economies accomplished by Muskegon. Individually packaged with easy-to-follow instructions that save work and assure the right installation every time. "Engine-Dated" sets deliver peak performance...that's why Muskegon has been the engine builders' source since 1921 and why more than 1 out of every 3 new cars is equipped with Muskegon.

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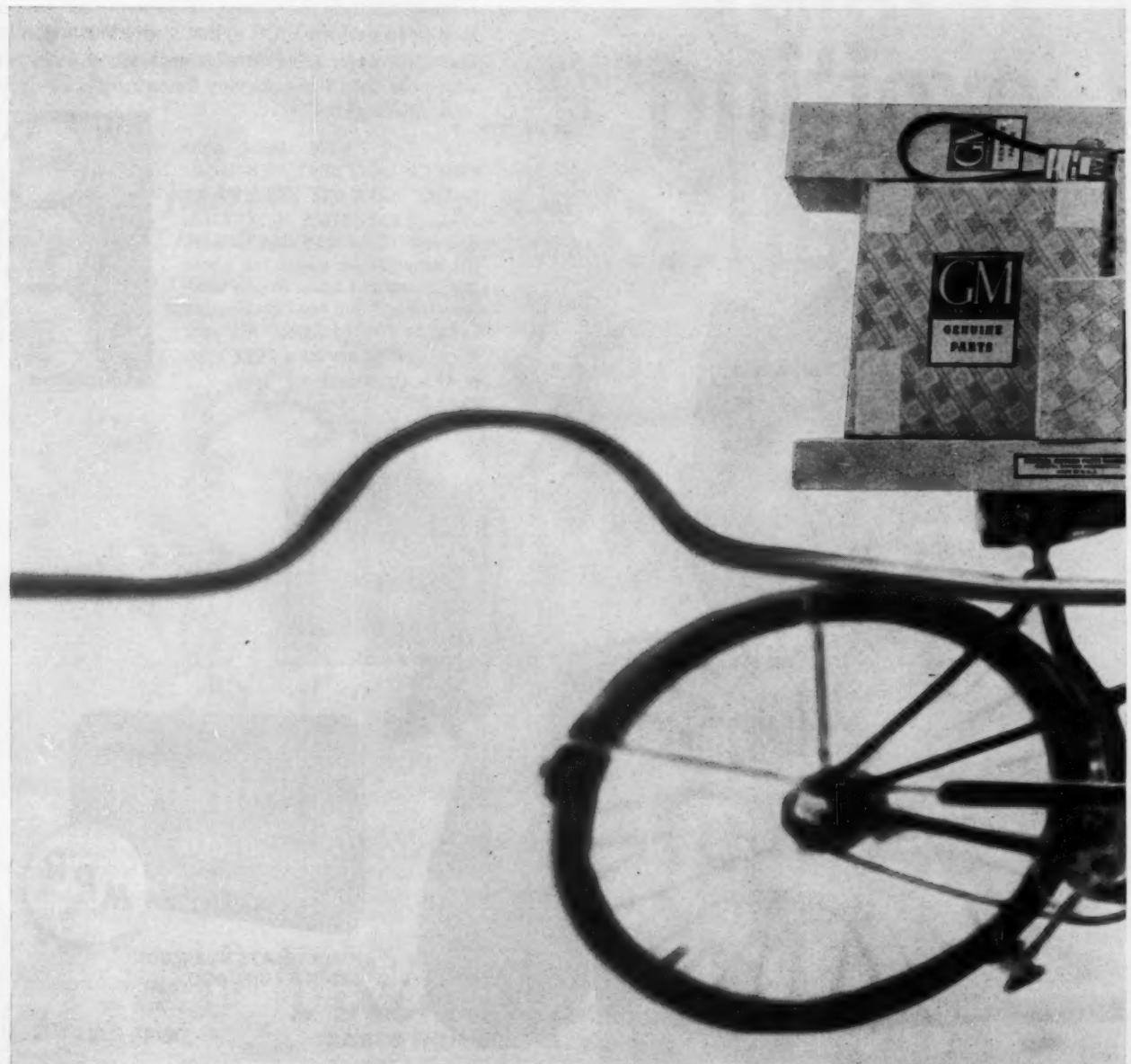


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The more than 18,000,000 Chevies now on the road mean business — profitable service business for you. That's where your Chevrolet dealer's P.D.Q. parts delivery comes in, because P.D.Q. is just another way of saying *Parts Delivered Quick*. By installing *genuine* Chevrolet parts, you're assured not only of prompt availability, but of reasonably priced, easy-to-install parts precision built to Chevrolet's factory specifications. Result—you'll give your customers faster, better service time after time, plus the added satisfaction of knowing you used high quality components.

Your Chevy dealer's well-balanced stock is one reason why you can depend upon him for *the Chevrolet parts you need when you need them*. Important, too, is the network of 41 Chevrolet factory warehouses designed to provide dealers with P.D.Q. delivery of temporarily out-of-stock parts for Chevies, Corvairs and Corvette.

Next time you need Chevy replacement parts, get in touch with your Chevrolet dealer's parts manager and he'll go to work for you. P.D.Q. . . Chevrolet Division of General Motors, Detroit 2, Michigan.



there's no business like Chevrolet business . . . make your Chevy dealer your partner in service!



Building Safety Continued from page 55

With the understanding that the exact modification can vary with the car, the driver, and the particular track the car will race on. The following outlines changes usually made in each category.

Increased Speed

Speed is increased by increasing power and by reducing weight. The changes that can be made depend upon the group sanctioning the race but again, there are certain modifications generally common to all stock cars fitted for racing:

Power is increased by:

- A. changing the valve activating mechanisms to increase power at the desired operating range
- B. increasing piston and bearing clearances to offset increased temperatures
- C. taking full advantage of AMA specifications to get maximum compression

- D. balancing engine
- E. adjusting carburation for maximum airflow
- F. re-working ignition to accommodate sustained high r.p.m.
 - 1. eliminate contact bounce
 - 2. increase dwell
 - 3. install proper spark plugs
 - 4. remove radio suppression cable (greater possibility of failure)
 - 5. reduce generator charging rate to minimum

Weight is decreased by:

- A. removing lights
- B. removing seats (regulations limit amount of front seat that can be removed)
- C. removing side glass
- D. removing standard instrumentation
- E. removing standard wiring
- F. removing kick panels
- G. removing headliners
- H. removing floor mats
- I. removing accessories

J. substituting light aircraft battery for heavier automotive battery

As this listing indicates, there are no secret ways stock car drivers use to increase the speed of their cars. As a matter of fact, no late model sanctioning body will permit much more than these changes and they carefully inspect to make sure that even these are within the limits established.

Consequently, almost anyone could follow this list and shoot the top speed of his late model car to well over 100 miles an hour. If any of you plan on doing it, I suggest that you also follow the safety precautions taken by the stock car driver.

Increased Safety

Many a racing devotee will take bows for the sport's contribution to automotive safety-pointing to developments like rear view mirrors, safety belts, and others as "discoveries" of racing. I think racing will have to share the credit with common sense.

FITZGERALD GASKETS have the answer

A full line of complete sets,
for engine rebuilding. Use
a Fitzgerald RS set today.

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SINCE 1906
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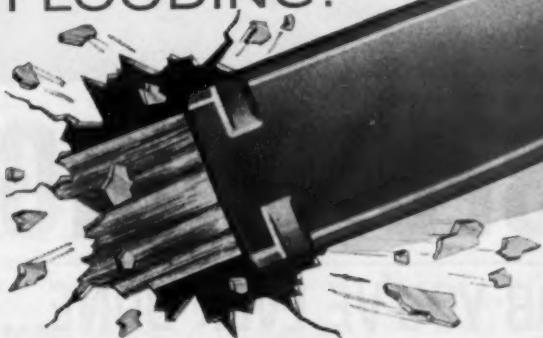


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Pioneer in the Manufacture of Quality
TOOL BOXES, TOOL CHESTS and ROLLER CABINETS

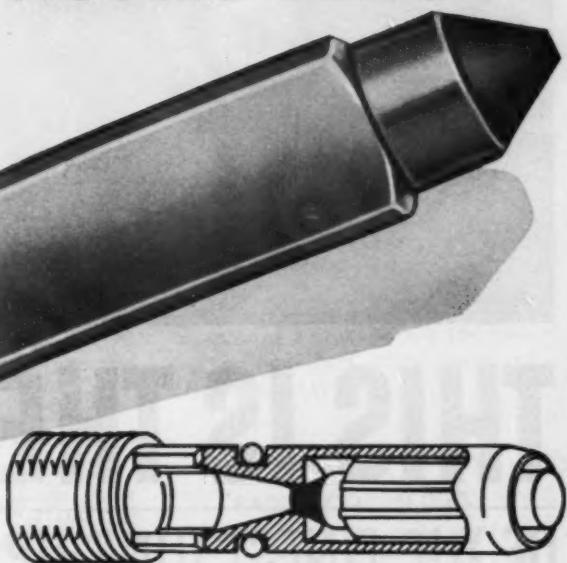


NEW!

A Major Break-through
in Eliminating the
Greatest Cause of
**CARBURETOR
FLOODING!**



HOLLEY Viton Fuel Inlet Needle Valve



The Holley Viton Needle Valve practically eliminates carburetor flooding caused by dirt in the fuel supply! Its tough, resilient tip of Viton permits perfect sealing of the valve and seat, virtually impossible with steel or rubber. Viton defies abrasion and high heat; erosion and "pounding" of the valve and seat due to engine vibration and contamination are eliminated! More than two years of exhaustive testing have proved that Holley's Viton Needle Valve assures thousands of miles of trouble-free service. And here's important news: 10 Holley Viton Needle and Seat assemblies cover all Holley late model single, dual and four-barrel carburetors. Look into this tremendous new opportunity for more sales and profits. Get the details from your Holley Distributor today.

*DuPont's Registered Trade Mark

ORDER TODAY!

Profit-Making Assortment



HC-500 Display Carton Assortment includes 10 needle and Seat Assemblies, each individually packaged in an attractive sealed plastic box.

**10 ASSEMBLIES THAT COVER
ALL LATE MODEL HOLLEY CARBURETORS**



HOLLEY
Carburetor Co.

11955 E. Nine Mile Road
Warren, Michigan

Original Equipment
Manufacturers of
Carburetion and
Ignition Products
for Over 55 Years

RT-43

123



THIS IS THE BEGINNING OF THE FINEST TUNE-UP JOB YOU'VE EVER DONE...

**A MOTORCRAFT QUALITY IGNITION POINT SET THAT'S BUILT TO BACK UP YOUR BEST WORK
WITH RELIABLE PERFORMANCE!**

The all-new line of MOTORCRAFT parts is built to rigid factory specifications to provide reliability that will help you *hold* customer good will. And customer

satisfaction means increased tune-up and repair business for increased profits! Here, for example, are a few reasons *why* MOTORCRAFT point sets are *reliable* . . .



- Two metal pieces, instead of one, are used for conductor and spring . . . in controlling breaker arm movement and electrical characteristics.
- Insulation eyelet is designed to maintain proper tension throughout life of the points.
- Rubbing block is double-riveted to movable breaker arm, and secure fastening is further provided by rigorous endurance test that "bounces" the rubbing block time and again . . . much harder than in normal usage.
- MOTORCRAFT tungsten tips are cut with a diamond wheel from the highest grade (99.3% pure) tungsten rod . . . only tungsten rod insures superior graining structure.
- The stationary point is ventilated . . . MOTORCRAFT points last up to three times longer than non-ventilated types.

And, throughout assembly . . . 21 gauges, including functional test equipment, are used to inspect the point assemblies. High quality control like this is *typical* of the manufacture of *all* the parts in the fast-moving MOTORCRAFT line. MOTORCRAFT parts cover a wide range for electrical, ignition and carburetor tune-up and repair jobs, and are available from leading jobbers everywhere. Give your jobber a call—and ask about MOTORCRAFT's Quick Reference catalog.

BUILT TO BACK UP YOUR BEST WORK



Tax Savings Continued from page 57

value of all business magazines and classifies them as a legitimate business expense.

6. Did you pay dues in any organization this year?

The Internal Revenue Code permits you to deduct dues to the Chamber of Commerce, trade associations, business associations and professional societies. If you belong to social clubs for business purposes, you are also allowed to deduct these dues from your income tax. Be prepared to show that social club deductions are definitely for business purposes.

Employees

7. Did you pay any employee \$10,000 or more during the year including salary, bonus and expense allowances?

Space is provided on the new income tax forms to report the information about your top paid employees who received \$10,000 or more in income and allowances. There is space for listing top individuals, but you are not required to list any if you did not pay them more than a combined total of salary and allowances of \$10,000 each during the tax year.

8. Did you make any bonus payments to employees during the tax year?

Bonus payments are considered as extra compensation for your employees. This is an ordinary and necessary expense of doing business. Check on higher-than-average bonus payments to relatives or major stockholders to be sure they will be allowed by the Internal Revenue Service.

9. Did you pay any pensions to former employees during the year?

Normally these payments are included in regular expenses of doing business and are not overlooked. However, it will save you income tax dollars if you check to be sure you have included these payments as a regular business expense for your income tax purposes.

Leases

10. Did you make any alterations on any property you lease?

Investments made to change or improve the property you rent for your business can be deducted from your income tax. Determine the annual amortization by dividing the total of the improvement cost by the number of years left on the lease. Deduct this annual amortization amount as a current cost of doing business from your income tax.

11. Did you restore any property you rented and abandoned this year to its former condition?

Rented property that was altered for business purposes and which must be restored to its original condition when the lease expires represents a valid income tax deduction. This is considered an expense of doing business and may be deducted in full in the tax year when the restoration is made.

12. Did you deduct rent paid in advance on any leases that expires this year?

Advance rental payments made on leases usually are for the last several months of the lease. Thus, they should be charged as rent during the year that the lease expires. Be sure that you take this income tax deduction to save money.

Imported Car Registrations* For Month of December, 1960

	1960	1959	
Volkswagen	15,823	Volkswagen	15,488
Renault	2,450	Renault	8,165
Mercedes Benz	1,285	English Ford	3,512
Opel	1,080	Opel	3,192
Triumph	945	Fiat	2,929
Flat	908	Simca	2,106
Volvo	901	Hillman	1,743
Simca	854	Vauxhall	1,708
Austin Healey	782	Volvo	1,496
English Ford	719	Triumph	1,495
All Others	7,049	All Others	13,088
Total	32,334	Total	54,930

Twelve Months Total

	1960	1959	
Volkswagen	159,995	Volkswagen	120,442
Renault	62,772	Renault	91,073
Opel	25,533	English Ford	42,512
English Ford	23,602	Opel	39,602
Fiat	20,773	Fiat	38,468
Triumph	17,720	Simca	35,190
Flat	17,077	Hillman	28,185
Simca	16,322	Vauxhall	23,476
Austin Healey	14,435	Triumph	23,072
Mercedes Benz	13,926	Volvo	18,533
Volvo	12,630	All Others	153,378
Total	498,630	Total	614,131

* Compiled from official state records. Data property of R. L. Polk & Co. May not be copied, sold or reprinted without Polk permission.

Comanche Engine . . .

Continued on page 60

It can be readily seen that this Four is quite exceptional since it embodies the major features of a heavy duty truck V-8. Necessarily the crankshaft had to be designed specifically for the Four. It is forged shaft with five main bearings. Unlike the V-8, which has external provision for balance, the Four is internally balanced and used without a vibration damper.

In the process the bearings too were changed. Main bearings are of precision type, steel back with aluminum lining. Connecting rod bearings too are of steel back aluminum type.

One of the noteworthy features developed for this engine is an aluminum intake manifold, designed to serve as a transfer for the cooling system fluid, thus being of water-heated type.

PAUL WOOTON DIES

Paul Wooton, 79, a member of the Editorial Board of the Chilton Publications and Washington correspondent for the New Orleans Times-Picayune since 1914, died Feb. 16.

Mr. Wooton, who had an uncanny memory for names, held the highest offices in several newsmen's organization such as the National Press Club, Gridiron Club and the White House Correspondents Association.

For many years he managed the annual White House correspondents' dinners and press receptions for visiting foreign dignitaries.

Mr. Wooton began his reportorial career by writing mining news in Mexico in 1906. When he moved to New Orleans he also represented two Chilton publications, Motor Age and Commercial Car Journal.

Transferred to Washington, he later was made bureau chief for McGraw-Hill Publications. In 1945 Mr. Wooton became a member of the Chilton Editorial Board.

He was a co-founder and former president of the Society of Business Magazine Editors. When his term expired he was made chairman of the Society's Executive Committee. He was executive vice president when he died.



Again this year the hot ones will depend on DOWGARD coolant!

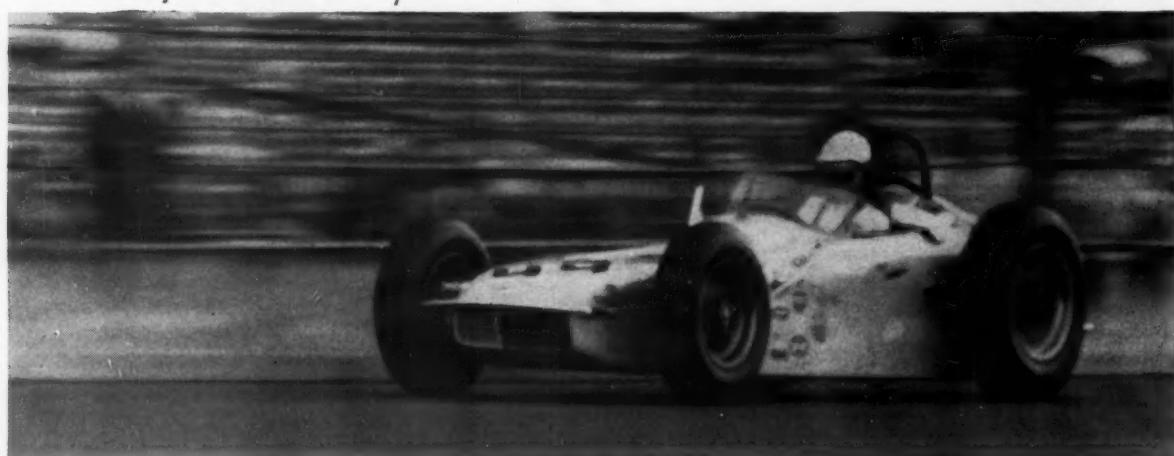
The 1961 racing year got off to a flying start at Daytona Beach and Darlington—and DOWGARD® Full-Fill® coolant was there. If 1960 results are any indication, 1961 racing will be spectacular!

During the past year, DOWGARD helped set some mighty impressive records . . . firsts at Charlotte, Darlington, Hanford, Langhorne and Weaverville, to mention but a few!

Again in '61, DOWGARD Full-Fill coolant is an official coolant for all NASCAR sanctioned events. It has proved its worth under the most grueling race conditions possible on two continents.

Proved in the lab, proved on the track, proved in traffic! DOWGARD coolant is now recommended for two full years in 1958 and newer model cars.

DOWGARD



THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

They stop smoking



Side-sealing to prevent smoking. Oil doesn't pass around the back of this American Hammered stainless steel oil ring because of the pressure of the chrome-plated side rails against the sides of the piston groove. Continuous pressure is applied to these side rails by the multitude of sturdy shoulders on the stainless steel expander. Pressure is constant and uniform throughout the life of the ring • Oil cannot be drawn around the back of the ring, even under deceleration or high vacuum conditions. American Hammered, Automotive Replacement Division, Sealed Power Corp., Muskegon, Michigan.

U.S. Pat. No. 2,789,872

AMERICAN HAMMERED

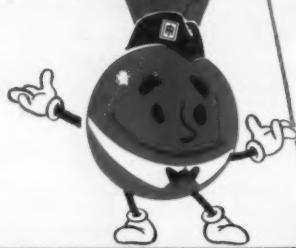


stainless steel oil rings

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FASTER!
SHORTER!
MORE POWERFUL!



SIZE 410
WEIGHS ONLY 11 1/2 LBS.

3/4" DRIVE
A "MUST"
FOR EVERY
CAR, TRUCK
AND
FLEET SHOP!



**THIS RUGGED, NEW, SIZE 410 IMPACTOOL GIVES YOU ALL THESE ADVANTAGES
OVER THE PREVIOUS SIZE ...**

- 20% More Power runs nuts up tighter . . . busts the frozen ones loose easier.
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- 2 1/4" Shorter Length gets at more jobs in tight places.
- Built-In Power Regulator throttles down quickly and conveniently to run smaller nuts with the same tool.
- Pressure Feed Lubrication—longer top-power operation with increased tool life.
- Adjustable Exhaust Deflectors—exhaust is adjustable so it doesn't hit you in the face at any time.
- New Reverse Valve Mechanism—no air leakage around the valve . . . easier maintenance.
- Heat-Treated Steel Hammer Case will take a lot of punishment and still stay on the job.

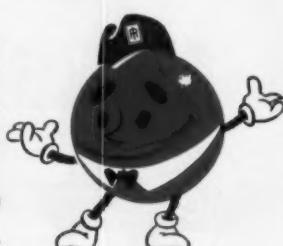
These advantages mean lowered shop costs . . . higher shop profits. And . . . mechanics like them too!

*best design—biggest line
look for the red ● ball extras*

Ingersoll-Rand

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Shop Operators!
Only Ingersoll-Rand
gives you a choice of
6 powerful
"big-job" tools
5/8", 3/4", 1" Drive Sizes
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**"copy cats
are a
dime a
dozen"**

The strength of a leader is usually indicated by the number of followers. That's why there are so many different kinds of autobody fillers on the market. That's also why we feel it's important for you to know that Jet Black is the **original**, black flexible autobody filler . . . and Jet Bond is a semi-flexible autobody filler. Because they're the leaders, they can do the best job for you. Why accept a copy cat . . . they're a dime a dozen!

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We'll send you a free plastic applicator with your order of 1 gallon or more Jet Black or Jet Bond. Mail coupon for free sample of Jet Black or Jet Bond without obligation.

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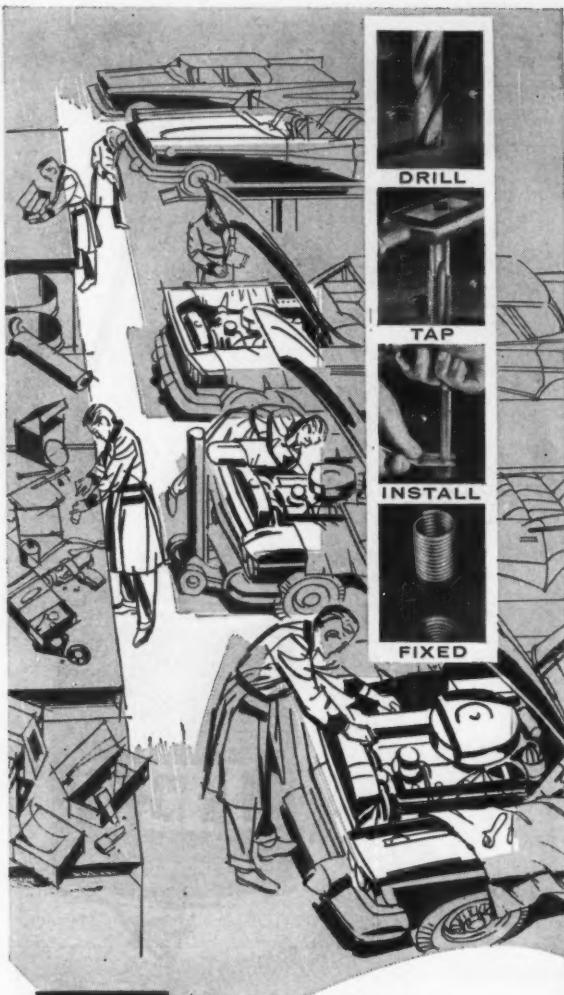
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**Repair Stripped Threads
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Make thread repairs in minutes, for only pennies per hole. Use **HELI-COIL®** Stainless Steel Wire Screw Thread Inserts to restore threads to original dimensions... no need to change screw sizes! Permanently prevent wear, stripping, corrosion, galling and seizing. Provide lifetime protection to tapped holes in all metals... even in aluminum, magnesium and other light materials.

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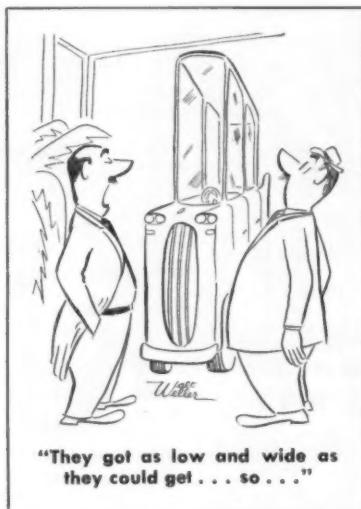
THE LAST

LAFF



Some fellow has invented transparent books, so you can watch television through them.

Great scholars never graduate in a hurry—they do it in degrees.



Magistrate: "Can't this case be settled out of court?"

Pat: "Sure, your honor. That is just what me and Mike was trying to do when the police interfered!"

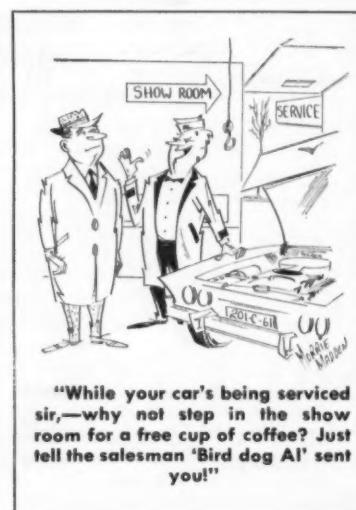
Married life: One undarned thing after another.

Some public speakers would be more successful if they had better terminal facilities.



"My husband thinks a woman driver's place is in the home."

Many a go-getter is afterwards sorry that he gotter.



"While your car's being serviced sir,—why not step in the show room for a free cup of coffee? Just tell the salesman 'Bird dog Al' sent you!"

Do you know how to tell a dream from a nightmare? Catch her without makeup.

It's a funny thing about money. Men get their faces on it, but women get their hands on it.

Prosperity brings us friends and adversity serves to prove them.



"You said it needed new plugs, didn't you?"

Many a guy who trades in his car every two years hadn't missed a payment in 14 years.

Under certain circumstances silence has the most telling effect.



**"Last year we banked
an extra \$1024 profit
just by checking every belt!"**

**Says Aubrey Thompson, Aubrey Thompson Motor Co.
352 South Glenwood • Tyler, Texas**

"The way I figure it," Mr. Thompson explains, "the profit we make on every Gates Belt we sell is pure gravy. We're servicing cars anyhow, so it costs us nothing to look at the underside of the belts."

"Fact is, the extra load today's accessories put on fan belts makes it a 'must' to check this item on every car. With coverage of practically every car provided by the Gates Line, plus the Dial Finder and Display Rack to speed getting the right belt, we find it's only a matter of minutes to make the sale and install the belt.

"That's why I say that Gates Belt profits are pure gravy in my operation. Just by checking every belt we make 60 to 70 belt sales every month. That means, last year we banked an extra \$1,024 from belt sales alone. Gates Radiator Hose gives us gravy profits too — it's another good source of extra income."



Replace belts
that are . . .



The Gates Rubber Company, Denver, Colorado.



World's Largest Maker of V-Belts

Gates Vulco V-Belts & Hose

Does the AP 15-Minute Installation Claim Sound Too Good to Be True?

Read what just a few of our many enthusiastic dealers say



Thomas Askins, Merit's Sunoco, Lambertville, Mich.: "Frankly, I was a little skeptical at first about this 15-minute installation stuff and to tell the truth some jobs do take a little longer. But I find my customers don't hold a stopwatch on me. If a difficult job runs five or ten minutes over they don't squawk. The idea is the job can be done while they wait."



Nick Wagener, Wagener's Sunoco Service, Maumee, Ohio: "We used to lose a lot of business because we weren't equipped to do 15-minute muffler installation work. We were keeping the shop down the street busy by sending them our customers. No more of that now that we have the AP gun and 15 min. installation sign. We keep the business and make the dough."



Joseph F. Di Pri, Canton Ford, Riverside, N.J.: "You couldn't buy back that AP muffler gun from me at twice what I paid for it. When I think how we used to struggle to get a rusted muffler or pipe off a car, I realize I've got the answer in the AP gun. Most jobs take no more than 15 minutes and I don't have to neglect my regular station services."



Charles A. Caleri, Bab's Auto Service, So. Weymouth, Mass.: "We're sure glad we cast our lot with AP when we decided to take on muffler work. You fellows give us all the technical and merchandising help anyone could ask for. Your product is top quality, your deals are clean and money-makers and that AP gun makes muffler work a snap."



SELL 15-MINUTE INSTALLATION...

**THE PROFIT PART
OF YOUR BUSINESS**

THE AP PARTS CORPORATION

3-P AP Building • Toledo 1, Ohio

AP MUFFLERS ARE SOLD BY MORE DEALERS THAN ANY OTHER BRAND



Charlie McCafferty, owner of the Esso Station in Media, Pa.: "We didn't get into the muffler business until AP came out with the gun deal, but then we really got in. With the AP clinic and Muffler Service Manual it took our men no time at all to learn how to do a muffler job in 15 minutes. The very first month we took in \$300 that would have gone down the street to competition if we hadn't pulled them in with our A-board. Not a week goes by but we do a rousing business in mufflers and pipes."

Your prospects are made aware of the AP name through 45,000 A-boards and 4-color advertising in the Saturday Evening Post.

